TAB 1

Notice of Intent

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

PITTSFIELD AQUEDUCT COMPANY, INC.

DOCKET NO. 20-____

RATE PROCEEDING

NOTICE OF INTENT TO FILE RATE SCHEDULES

Pursuant to N.H. RSA 378:3 and N.H. Code Admin. R. 1604.05(a) (requiring thirty days' notice), Pittsfield Aqueduct Company, Inc. (PAC), hereby gives notice of its intent to file rate schedules with the New Hampshire Public Utilities Commission. Pursuant to N.H. Code Admin. R. 1604.05(c), such rate schedules will be filed within sixty days of this notice.

Pursuant to RSA Chapter 378 and N.H. Code Admin. R. 1604.05(b), PAC will be seeking to increase its revenue requirement by approximately $112,588.00, or 14.51%, above its last authorized revenue requirement. PAC's last rate case was in 2013 in Docket No. DW 13-128. The proposed increase averages to approximately 1.95% per year since PAC's last rate case.

PITTSFIELD AQUEDUCT COMPANY, INC.

By its attorney,

Marcia A Brown

Dated: September 17, 2020

Marcia A. Brown
NH Brown Law, PLLC
20 Noble Street
Somersworth, NH 03878
(603) 219-4911/mab@nhbrownlaw.com

CERTIFICATE OF SERVICE

I hereby certify that a copy of this notice was emailed this day to the Office of the Consumer Advocate and to the Commission's electronic service list for initial filings.

Dated: September 17, 2020

Marcia A Brown

Marcia A. Brown

TAB 2

PAC Cover Letter

NH Brown Law

Environmental Law ▪ Utility Law

Marcia A. Brown
Attorney at Law

November 16, 2020

VIA ELECTRONIC DELIVERY
Debra A. Howland, Executive Director
New Hampshire Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, N.H. 03301

Re: DW 20-153 – Pittsfield Aqueduct Company, Inc.
Permanent Rate Proceeding

Dear Director Howland:

Pursuant to the Commission's temporary electronic filing requirements, enclosed please find for filing Pittsfield Aqueduct Company, Inc.'s PART Puc 1604 general rate schedules and other filing requirements. Hardcopies will be provided shortly for the Commission's convenience of review. Please add the attached contact information to the Commission's official service list.

Thank you for your assistance with this filing. Please do not hesitate to contact me if you have any questions.

Very Truly Yours,

Marcia A. Brown

Marcia A. Brown

Enclosures
cc: Docket-Related Service List for DW 20-153

20 Noble Street ▪ Somersworth ▪ NH 03878
603-219-4911 ▪ mab@nhbrownlaw.com ▪ www.nhbrownlaw.com

DW 20-153 Service List Additions:

Larry D. Goodhue
Pittsfield Aqueduct Company, Inc.
25 Walnut Street
Nashua, NH 03060-3347
larry.goodhue@pennichuck.com

Donald L. Ware
Pittsfield Aqueduct Company, Inc.
25 Walnut Street
Nashua, NH 03060-3347
donald.ware@pennichuck.com

Carol Ann Howe
Pittsfield Aqueduct Company, Inc.
25 Walnut Street
Nashua, NH 03060-3347
carolann.howe@pennichuck.com

Jay Kerrigan
Pittsfield Aqueduct Company, Inc.
25 Walnut Street
Nashua, NH 03060-3347
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Marcia A. Brown, Esq.
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20 Noble Street
Somersworth, NH 03878
mab@nhbrownlaw.com

John S. Clifford, Esq.
Clifford Law Offices, PLLC
4 Little Rabbit Lane
Johns Island, SC 29455
profilelaw@gmail.com

TAB 3

Index of Documents

Index of PAC DW 20-153 Rate Case Documents

Index of PAC DW 20-153 Rate Case Documents

Index of PAC DW 20-153 Rate Case Documents

TAB 4

Attestation

ATTESTATION REQUIRED BY PUC 1604.04

Pursuant to N.H. Admin. Rule Puc 1604.04, the undersigned executive in charge of utility accounts for Pittsfield Aqueduct Company, Inc. does hereby attest as follows:

I, Larry D. Goodhue, the officer in charge of the utility accounts of Pittsfield Aqueduct Company, Inc., affirm, based on my personal knowledge, information and belief, that the cost and revenue statements, and the supporting data submitted, which purport to reflect the books and records of the company, do in fact set forth the results shown by such books and records and that all differences between the books and the test year data and any changes in the manner of recording an item on the utility's books during the test year, have been expressly noted.

Date: November 12, 2020

Larry D. Goodhue, Chief Executive Officer
Pittsfield Aqueduct Company, Inc.

STATE OF NEW HAMPSHIRE
HILLSBOROUGH COUNTY

Subscribed and sworn to on this 12th day of November, 2020, before me,

Justice of the Peace/Notary Public

SUZANNE L. ANSARA
MY COMMISSION EXPIRES AUG. 22, 2023
NOTARY PUBLIC
NEW HAMPSHIRE

My Commission Expires: ____________

TAB 5

Petition for Temporary Rates

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 20-153

Pittsfield Aqueduct Company, Inc.

Permanent Rate Proceeding

PETITION FOR TEMPORARY RATES

NOW COMES, Pittsfield Aqueduct Company, Inc. ("PAC" or the "Company"), pursuant to RSA 378:27 and 378:29 and in accordance with N.H. Admin. Rule Puc 203.07, hereby requests that the New Hampshire Public Utility Commission (the "Commission") set PAC's current rates, effective on a service rendered basis thirty days after the date of this filing, as temporary rates. In support of its petition, PAC states as follows:

1. PAC filed its notice of intent to file rate schedules with the Commission on September 17, 2020, which the Commission acknowledged by Secretarial Letter dated September 21, 2020. PAC is filing its rate schedules ("Rate Filing") to change its permanent rates contemporaneously with this petition.

2. RSA 378:27 authorizes the Commission to grant temporary rates if, in its opinion, the public interest so requires and the records of the utility on file with the Commission indicate it is not earning a reasonable return on its property used and useful in the public service. Moreover, RSA 378:27 allows the Commission to authorize effective dates as early as the date on which the petition for a permanent rate change is filed. *Pennichuck Water Works, Inc.*, Order No. 24,377 at 7 (September 30, 2004), citing *Appeal of Pennichuck Water Works*, 120 NH 562, 567 (1980). "Further, the analysis and investigation conducted by the Commission in a

temporary rate case need not be as intensive as that deemed necessary in a permanent rate proceeding." *Pennichuck Water Works, Inc.,* Docket No. DW 01-081, Order No. 23,770 at 5 (Aug. 31, 2001) (citation omitted). The Commission may rely on books and records already on file with the Commission. *Appeal of Office of Consumer Advocate*, 134 N.H. 651, 659 (1991) ("New Hampshire law allows the PUC in a rate case to rely on records and reports that a utility is required to file with it." "Included among those record and reports are the utility's annual reports.")

3. As is detailed in the accompanying testimony, and as measured under a conventional rate of return model, PAC's rate of return was 1.44 % for the Test Year (Adjusted Net Operating Income from 1604.06 Schedule 1 of $46,620 divided by Consolidated Rate Base of $3,234,472 derived on 1604.06 Schedule 3) as evidenced in 1604.06 Schedule A, Perm-Conventional filed with its permanent rate case schedules with no pro forma. This rate of return is far too low to cover principal and interest payments to PAC's parent, Pennichuck Corporation, as well as being far below the allowed Test Year Rate of Return of 3.74% as detailed on 1604.06 Schedule 1A. Moreover, as described in his testimony before the Commission in DW 19-084, (Pennichuck Water Works, Inc.) Mr. Larry Goodhue explained that the expense statements on file with the Commission don't reflect long-term debt owed to the parent. As Mr. Goodhue noted, the Statement of Income and Expense on file with the Commission is formulated around an investor owned utility that has a return on equity and depreciation expense in its revenue requirement. The income statement on file with the Commission does not accurately reflect the company's cash position. See Hearing Transcript May 13, 2020, DW 19-084 at pp. 23 -26. Similarly, PAC's books and records on file with the Commission don't accurately reflect the rate relief it needs.

4. As shown on PAC's Puc 1604.06 Schedules, Schedule A Perm-Conventional, PAC's 2019 test year revenue needs were $820,029 after *pro formas* to the test year to allow for the rate making methodology approved in DW11-026. PAC's actual 2019 TY revenues, accounting for the City Bond Fixed Revenue Requirement ("CBFRR"), were $771,874, exclusive of other Operating Revenue. Based on the rate-making methodology approved in DW 19-084, Schedule A Proposed, which PAC seeks, its revenue needs are $862,927, exclusive of other Operating Revenues and actual revenues were $771,874 exclusive of other Operating Revenues. These books and records clearly demonstrate an earnings deficiency for PAC, regardless of which ratemaking structure is used. Because PAC seeks to modify its ratemaking structure to that of its affiliate PWW, as approved in DW 19-084, the computation of the revenue deficiency results in a proposed revenue increase of 11.18%

5. Notwithstanding the fact that PAC's records and reports demonstrate a material revenue deficiency, PAC requests that the Commission fix and determine, pursuant to RSA 378:27, temporary rates at its current rate levels. See attached tariffs. The decision to accept current rates as temporary rates is in light of the economic developments of 2020 and are predicated on full recoupment at the conclusion of the rate case. This request to establish current rates as temporary rates (as opposed to some other rate level) is not presently a justiciable issue but PAC presumes that the Commission will suspend PAC's permanent rate tariffs before they go into effect and that the Commission will not on its own accord, pursuant to RSA 378:27, order temporary rates. PAC believes the instant petition and request that temporary rates be set at current rates will promote efficiency in this proceeding by avoiding the need for material proceedings related to any change in current rates.

6. As to an effective date for temporary rates, pursuant to RSA 378:3 "[u]nless the commission otherwise orders, no change shall be made in any rate, fare, charge or price, which shall have been filed or published by a public utility in compliance with the requirements hereof, except after 30 days' notice to the commission and such notice to the public as the commission shall direct.); *Appeal of Pennichuck Water Works*, 120 N.H. 562, 567 (1980) wherein the Court held that "[a]ccordingly, we hold that the earliest date on which the Commission can order temporary rates to take effect is the date on which the utility files its underlying request for a change in permanent rates." "In no event may temporary rates be made effective as to services rendered before the date on which the permanent rate request is filed."; and *Pennichuck Water Works, Inc*., Docket No. DW 04-056, Order No. 24,377 (Sept. 30, 2004). In this case, PAC is filing its rate schedules and tariffs today, and it set the temporary rates to be effective thirty (30) days from today, December 17, 2020.

7. In conclusion, based on the books and records on file with the Commission, including the testimony attached hereto, PAC believes it has demonstrated that it is eligible for the temporary rate relief requested herein.

WHEREFORE, the Company respectfully requests that the Commission:

A. Fix, determine, and prescribe, pursuant to RSA 378:27 and 378:29, temporary rates for PAC at its current rate levels, effective December 17, 2020;

B. Order that temporary rates remain in effect until such time as the Commission issues a final order establishing permanent rates;

C. Grant such other relief as is just and equitable.

Respectfully submitted,

Pittsfield Aqueduct Company, Inc.

By its Attorney,
NH BROWN LAW, PLLC

Date: November 16, 2020 By: Marcia A Brown

Marcia A. Brown, Esq.
20 Noble Street
Somersworth, NH 03878
(603) 219-4911
mab@nhbrownlaw.com

CLIFFORD LAW OFFICES, PLLC

Date: November 16, 2020 By: ______________________

John S.G. Clifford, Esq.
4 Little Rabbit Lane
Kiawah Island, SC 29455
(914) 584-1628
profilelaw@gmail.com

Certificate of Service

I hereby certify that on this day, a copy of this petition has been emailed to the official service list for this proceeding.

Date: November 16, 2020 Marcia A Brown

Marcia A. Brown, Esq.

NHPUC NO. 5 WATER — ~~Ninth~~ Tenth Revised Page 38

PITTSFIELD AQUEDUCT COMPANY, INC. — Superseding ~~Eight~~ Ninth Revised Page 38

TEMPORARY
GENERAL SERVICE – METERED
TOWN OF PITTSFIELD
SCHEDULE GM

Application:
This schedule is applicable to all metered water service in the Town of Pittsfield, NH, except municipal and private fire protection.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:
A minimum customer charge shall be made for each customer to whom service is rendered under this tariff, based on the meter size shown below:

Size	Monthly Minimum Charge
5/8"	$ 24.49
3/4"	34.89
1”	52.69
1 1/2"	95.09
2"	147.10
3"	273.29
4"	447.87
6"	893.36
8"	1,485.85

Volumetric Rate:
In addition to the minimum charge, the volumetric charge, based on usage shall be:

Volumetric Charge $6.48 per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22,2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22,2014~~December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~25,695~~ Docket No. DW 20-153~~13-128~~, dated ~~July 22, 2014.~~

TEMPORARY
MUNICIPAL FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-M

Application:
This rate is applicable to municipal fire protection in the Town of Pittsfield.

Character of Service:
The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rate:
The monthly charge for municipal fire protection service shall be made up of two parts, as follows:

		Monthly Charge
1.	Hydrant Charge	
	For each hydrant connected to the distribution system	$94.93 per month

2. Inch-Foot Charge

The number of "inch-foot" units in the distribution system is to be obtained by multiplying the number of linear feet of pipe of each diameter (6" and larger) by the diameter in inches. The total number of "inch-foot" units in the distribution system will be determined as of January 1st each year, and will be the basis for computing the "inch-foot" charge for the entire year with one-twelfth to be billed each month.

Charge for each inch-foot unit to be $0.20001 per year

Terms of Payment:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware ~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~25,695~~ Docket No. DW 20-153 ~~13-128~~, dated ~~July 22, 2014.~~

NHPUC NO. 5 WATER ~~Ninth~~ Tenth Revised Page 40

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding Ninth ~~Eight~~ Revised Page 40

TEMPORARY
PRIVATE FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-P

Application:
This schedule is applicable to fire protection in the Town of Pittsfield other than municipal, such as private hydrants, fire hose outlets and sprinkler systems, connected to the Company's distribution system.

Character of Service:
The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rates - MONTHLY:	Monthly Charge
For each 4-inch connection or service	$ 67.68
For each 6-inch connection or service	$ 194.21
For each 8-inch connection or service	$ 412.47

Terms of Payment:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~25,695~~ Docket No. DW 20-153 ~~13-128,~~ dated ~~July 22, 2014.~~

NHPUC NO 5 WATER ~~Proposed Third~~ Fourth Revised Page 44

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding ~~Second~~ Third Page 44

TEMPORARY
RATE SCHEDULE

GENERAL SERVICE – NON-METERED

TOWN OF PITTSFIELD

Pittsfield Aqueduct Company, Inc. (PAC) will charge current unmetered customers a monthly rate as specified below based on the average single family residential usage as specified below until such time as meters are installed.

Commercial, Industrial and Private Fire Protection customers will be charged an average Rate as calculated for a similar customer in PAC.

PAC will make every effort to install meters in a timely manner and in no such case should these rates remain in force for more than a twelve month period.

	~~**Temporary Rate**~~
5/8” Meter Charge	$24.49 per month
Volumetric Charge	$ 6.48
Average Single Family Residential Usage	5.83 CCF
	$37.78
Total Monthly Charge	$62.27
Annually	$747.24

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~25,695~~ Docket No. DW 20-153 ~~13-128,~~ dated ~~July 22, 2014.~~

NHPUC NO. 5 WATER ~~Proposed Second~~ Third Revised 46

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding ~~First~~ Second Page 46

TEMPORARY
GENERAL SERVICE – METERED
TOWN OF PITTSFIELD FIRE DEPARTMENT
SCHEDULE GM

Application:
This schedule is applicable to metered water service for the Fire Department in the Town of Pittsfield, NH.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:

The Fire Department for the Town of Pittsfield shall be charged only for usage over 14 ccf of water per month. There will be no charge for the monthly customer charge.

Volumetric Rate:
The volumetric charge based on usage over 14 ccf shall be:

Volumetric Charge: $6.48 per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~25,695~~ Docket No. DW 20-153 ~~13-128,~~ dated J~~uly 22, 2014.~~

NHPUC NO. 5 WATER — Tenth Revised Page 38

PITTSFIELD AQUEDUCT COMPANY, INC. — Superseding Ninth Revised Page 38

TEMPORARY
GENERAL SERVICE – METERED
TOWN OF PITTSFIELD
SCHEDULE GM

Application:
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Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

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In addition to the minimum charge, the volumetric charge, based on usage shall be:

Volumetric Charge — $6.48 per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 — Issued by: Donald L. Ware

Effective: December 17, 2020 — Title: Chief Operating Officer

Authorized by NHPUC Order No. ________ Docket No. DW 20-153, dated_______.

TEMPORARY
MUNICIPAL FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-M

Application:
This rate is applicable to municipal fire protection in the Town of Pittsfield.

Character of Service:
The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rate:
The monthly charge for municipal fire protection service shall be made up of two parts, as follows:

	Monthly Charge
1. Hydrant Charge	
For each hydrant connected to the distribution system	$94.93 per month

2. Inch-Foot Charge

The number of "inch-foot" units in the distribution system is to be obtained by multiplying the number of linear feet of pipe of each diameter (6" and larger) by the diameter in inches. The total number of "inch-foot" units in the distribution system will be determined as of January 1st each year, and will be the basis for computing the "inch-foot" charge for the entire year with one-twelfth to be billed each month.

Charge for each inch-foot unit to be $0.20001 per year

Terms of Payment:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No.________Docket No. DW 20-153, dated______.

NHPUC NO. 5 WATER — Tenth Revised Page 40

PITTSFIELD AQUEDUCT COMPANY, INC. — Superseding Ninth Revised Page 40

TEMPORARY
PRIVATE FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-P

Application:

This schedule is applicable to fire protection in the Town of Pittsfield other than municipal, such as private hydrants, fire hose outlets and sprinkler systems, connected to the Company's distribution system.

Character of Service:

The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rates - MONTHLY:	Monthly Charge
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For each 6-inch connection or service	$ 194.21
For each 8-inch connection or service	$ 412.47

Terms of Payment:

Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 — Issued by: Donald L. Ware

Effective: December 17, 2020 — Title: Chief Operating Officer

Authorized by NHPUC Order No.________Docket No. DW 20-153, dated_______.

TEMPORARY
RATE SCHEDULE

GENERAL SERVICE – NON-METERED

TOWN OF PITTSFIELD

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Commercial, Industrial and Private Fire Protection customers will be charged an average Rate as calculated for a similar customer in PAC.

PAC will make every effort to install meters in a timely manner and in no such case should these rates remain in force for more than a twelve month period.

	~~Temporary Rate~~
5/8” Meter Charge	$24.49 per month
Volumetric Charge	$ 6.48
Average Single Family Residential Usage	5.83 CCF
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Total Monthly Charge	$62.27
Annually	$747.24

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

Authorized by NHPUC Order No.__________Docket No. DW 20-153, dated_______.

NHPUC NO. 5 WATER — Third Revised 46

PITTSFIELD AQUEDUCT COMPANY, INC. — Superseding Second Page 46

TEMPORARY
GENERAL SERVICE – METERED
TOWN OF PITTSFIELD FIRE DEPARTMENT
SCHEDULE GM

Application:

This schedule is applicable to metered water service for the Fire Department in the Town of Pittsfield, NH.

Character of Service:

Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:

The Fire Department for the Town of Pittsfield shall be charged only for usage over 14 ccf of water per month. There will be no charge for the monthly customer charge.

Volumetric Rate:

The volumetric charge based on usage over 14 ccf shall be:

Volumetric Charge: $6.48 per 100 cu. ft.

Terms of Payments:

Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 — Issued by: Donald L. Ware

Effective: December 17, 2020 — Title: Chief Operating Officer

Authorized by NHPUC Order No._______ Docket No. DW 20-153, dated__________.

TAB 6

Joint Temporary Rate Testimony of Larry Goodhue and Donald Ware

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 20 – 153

Pittsfield Aqueduct Company, Inc.
Permanent Rate Proceeding

DIRECT JOINT TESTIMONY OF LARRY D. GOODHUE AND DONALD L. WARE

IN SUPPORT OF PETITION FOR TEMPORARY RATES

November 16, 2020

I. INTRODUCTION

Q. Mr. Goodhue, would you please state your name, address and position with the Pittsfield Aqueduct Company?

A. My name is Larry D. Goodhue. My business address is 25 Walnut Street, Nashua, New Hampshire. I am Chief Executive Office and Chief Financial Officer of Pittsfield Aqueduct Company. (the "Company" or "PAC"). I have been employed with the Company since December, 2006. I am also Chief Executive Officer and Chief Financial Officer of Pennichuck Corporation ("Pennichuck"), which is the corporate parent of PAC.

Q. Please describe your educational background.

A. I have a Bachelor in Science Degree in Business Administration with a major in Accounting from Merrimack College in North Andover, Massachusetts. I am a licensed Certified Public Accountant in the State of New Hampshire. My license is currently inactive status.

Q. Please describe your professional background.

A. Prior to joining Pennichuck, I was the Vice President of Finance and Administration and previously the controller with METRObility Optical Systems, Inc. from September 2000 to June 2006. In my more recent role with METRObility, I was responsible for all financial, accounting, treasury and administration functions for a manufacturer of optical networking hardware and software. Prior to joining METRObility, I held various senior management and accounting positions with several private and publicly traded companies.

Q. What are your responsibilities as Chief Executive Officer of Pennichuck?

A. As Chief Executive Officer, I am responsible for the overall management of Pennichuck and its subsidiaries, including PAC. I report to the Board of Directors. I also work closely with the Chief Operating Officer, the Corporate Controller, Treasurer, Director of Water Supply, Chief Engineer, Distribution Manager, Assistant Treasurer, the Director of Human Resources and the Director of Information Technology to: (1) implement short and long-term financial and operating strategies, (2) insure the adequate funding of debt and expenses, and (3) to enable Pennichuck's utility subsidiaries to provide high quality water service at affordable rates, on a consistent basis.

Q. Mr. Ware, please state your name and position with Pittsfield Aqueduct Company.

A. My name is Donald L. Ware. I am the Chief Operating Officer of Pittsfield Aqueduct which is a subsidiary of Pennichuck Corporation. I am employed by and have worked for Pennichuck Water Works, Inc. since 1995. I am a licensed professional engineer in New Hampshire, Massachusetts and Maine.

Q. Please describe your educational background.

A. I have a Bachelor in Science in Civil Engineering from Bucknell University in Lewisburg, Pennsylvania and I completed all required courses, with the exception of my thesis, for a Master's degree in Civil Engineering from the same institution. I have a Master's in Business Administration from the Whittemore Business School at the University of New Hampshire.

Q. Please describe your professional background.

A. Prior to joining the Company, I served as General Manager of the Augusta Water District in Augusta, Maine from 1986 to 1995. I served as the District's engineer between 1982 and 1986. Prior to my engagement with the District, I served as design engineer for the State of Maine Department of Transportation for six months and before that as design engineer for Buchart-Horn Consulting Engineers from 1979 to 1982.

Q. What are your responsibilities as Chief Operating Officer of PAC?

A. As Chief Operating Officer, I am responsible for PAC's overall operations, including customer service, water supply, distribution and engineering. I work closely with PAC's Chief Engineer and other senior managers to help develop PAC's Annual and three-year Capital Improvement Plans.

II. REQUEST FOR TEMPORARY RATES

Q. What is the purpose of your joint testimony?

A. The joint testimony is offered for the purpose of supporting PAC's request for an overall rate increase of 11.18% which is an increase in revenues by $86,783 for a total revenue requirement of $862,927 as outlined in Schedule A Proposed filed in this docket. As demonstrated in its Schedule 1A, under a conventional ratemaking structure, PAC has demonstrated that for the twelve months ended December 2019, its overall rate of return for that period was 3.81%.

Q. Can you explain why the revenue deficiency is not readily apparent when reading a copy of PAC's 2019 Annual Report on file with the Commission?

A. Sure. As I explained before the Commission in DW 19-084, Pennichuck Water Works, Inc., ("PWW") income and expense statements on file with the Commission don't accurately reflect long-term debt owed to its parent. The Statements of Income and Expense submitted to the Commission are formulated around an investor owned utility that has a return on equity and depreciation expense in its revenue requirement and the statements PAC files don't really reflect the Company's cash position.

Q. On what date are you requesting that temporary dates be granted and why?

A. We are requesting that PAC be granted temporary rates, effective December 17, 2020, on a service rendered basis. This date is dependent on any difference between temporary rates and the permanent rates ultimately approved by the Commission in this docket being subject to full reconciliation back to December 17, 2020.

Q. Is there any benefit of temporary rates to customers?

A. Yes. The granting of temporary rates in this manner will mitigate the rate impact on customers by allowing customers to continue to budget for their current usage during this pandemic.

Q. Are you aware that N.H. Admin. Rules Puc 1203.05 provides that rate changes be implemented on a service rendered basis?

A. Yes. PAC plans to implement temporary rates such that they are effective on a service rendered basis.

Q. Will the temporary rates be spread uniformly across customer classes?

A. Yes. There will be no change in rate design if and until such time as the Commission approves a final order granting a permanent rate increase.

Q. What steps will PAC take to notify customers of the temporary rates?

A. PAC has posted its rate filing and request for temporary rates on its web site. PAC has also included in each customer bill a notice of the rate filing and the requested rates, both temporary and permanent. As the Commission is aware, PAC issues bills to its customers on a rotating basis throughout the month.

III. JUST AND REASONABLE FINDING AND CONCLUSION

Q. Do you believe that the temporary rates requested by PAC are just and reasonable and in the public interest?

A. Yes. As demonstrated by the analysis described above and in the rate case materials filed by PAC in this docket, PAC is now substantially under-earning since PAC's last rate case, Docket No. DW 13-128, due to an increase in costs, property taxes, and other expenses. The requested temporary rates will also serve to mitigate rate shock during this pandemic.

Q. Does that conclude your testimony on temporary rates?

A. Yes.

TAB 7

Report of Proposed Rate Change

Pittsfield Aqueduct Company
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2019

Pro Forma
Schedule 9
Permanent

DOCKET NO: DW 20-153 **DATE FILED:** 11/16/20
TARIFF NO.: 1 **or PAGE NOS.** 38, 39, 40, 44, 46 **EFF. DATE:** 12/17/20

					Proposed Change	
Rate or Class of Service	**Effect of Proposed Change**	**Average Number of Customers**	**Pro Forma Rates to five Year Ave.**	**Proposed Perm Rates**	**Amount**	**% Increase**
G-M	Increase	630	571,273	635,149	$63,876	11.18%
Private FP[1]	Increase	12	29,067	32,317	$3,250	11.18%
FP - Hydrants	Increase	1	175,804	195,461	$19,657	11.18%
TOTALS		**643**	**776,144**	**862,927**	**$86,783**	

Signed by: Donald L. Ware
Title: Chief Operating Officer

[1] Includes Private Fire Services and Private Hydrants - count is number of accounts

Pittsfield Aqueduct Company
Bingo Sheet Perm
For the Twelve Months Ended December 31, 2019

UTILITY: Pittsfield Aqueduct Company **DATE FILED:** 16-Nov-20

TARIFF NO.: 5 **or PAGE NOS.** 38, 39, 40, 44, 46 **EFF. DATE:** 17-Dec-20

Rate or Class of Service	Effect of Proposed Change	Average Number of Customers	Estimated Annual Revenue	Proposed Change		
			Pro Forma Rate to TY Five Year Ave	Proposed Rates	$$ Amount Increase over TY Current Rates 5 Yr. Ave. Pro Forma	% Increase
G-M	Increase	630	571,273	635,149	63,876	11.18%
Private FP[1]	Increase	12	29,067	32,317	3,250	11.18%
FP - Hydrants	Increase	1	175,804	195,461	19,657	11.18%
TOTALS		**643**	**776,144**	**862,927**	**86,783**	

[1] Includes Private Fire Services and Private Hydrants - count is number of accounts

PITTSFIELD AQUEDUCT COMPANY
Rate Impact on Average Single Family Residential Customer
Based on Proposed Rate Making Methodology

Customer Impact

	DW19-084 Rate Model	
Overall Revenue Requirement(3)	$ 862,927	
Current Water Revenues with CBFRR	$ 776,144	
Overall Revenue % Increase (1)	11.18%	
Base Rates (2):	Existing Rates	Proposed Rates
Monthly 5/8 inch Meter Customer Charge	$ 24.49	$ 27.23
Monthly Volumetric Charge based on Usage (2)	$ 33.63	$ 37.39
Total Average Single Family Residential Monthly Bill	$ 58.12	$ 64.62
Customer Impact from New Rates:		
Increase to the Total Average Single Family Residential Base Monthly Bill	$ 6.50	

Notes:

(1) Per Schedule 9 of the 1604.08 schedules the effective rate increase for a GM customer is 11.18%

(2) Base Volumetric Charge per CCF $ 6.48 granted in DW13-128

Average Single Family Residential Monthly Usage (CCF) during the test year 5.19

(3) Exclusive of other revenues

TAB 8

Customer Notice

Rate Increase Sought

PITTSFIELD AQUEDUCT COMPANY, INC.

Pittsfield Aqueduct Company, Inc. (PAC) has filed rate schedules with the New Hampshire Public Utilities Commission (Commission) to increase its rates for all customer classes, including General Metered, Non-Metered, Municipal Fire Protection-Hydrants, Private Fire Protection, and Metered Service for the Town of Pittsfield Fire Department. PAC has sought a permanent increase of 11.18% for all rate classes.

PAC seeks this increase based on increased operating expenses as well as investment in its plant and treatment systems to ensure continued compliance with the Safe Drinking Water Act. The increase sought for PAC residential General Metered customers would result in a change to the average bill as follows:

Average Residential Monthly Bill
Based on Average Monthly Usage of 5.19 CCF (100 Cubic Feet)

	Customer Charge Based on 5/8" meter	Volumetric Charge per CCF	Volumetric Charge	Total Monthly
Current Rates	$24.49	$6.48	$33.63	$58.12
Proposed Permanent Rate	$27.23	$7.20	$37.39	$64.62

The Commission will issue an order scheduling a Pre-Hearing Conference to be held via WebEx. When the order is issued, the Company will post it at www.pennichuck.com and publish the order in area newspaper(s). At the Pre-hearing Conference, the Commission will hear preliminary statements from PAC and other parties, and will consider requests for formal intervener status.

The Pre-Hearing Conference is open to the public. Customers and other interested parties are invited to attend the hearing and comment on PAC's request. Those unable to attend the Pre-Hearing may submit written comments to the New Hampshire Public Utilities Commission at 21 South Fruit Street, Suite 10, Concord NH 03301 or via e-mail at puc@puc.nh.gov Tel: (603) 271-2431 Fax: (603) 271-3878.

For more information please reference the enclosed information sheet or call Pittsfield Aqueduct Company, Inc. at 1-800-553-5191

TAB 9

Testimony of Larry Goodhue and Attachments

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 20-153

Pittsfield Aqueduct Company, Inc.
Permanent Rate Proceeding

DIRECT TESTIMONY OF LARRY D. GOODHUE

November 13, 2020

TABLE OF CONTENTS

I. INTRODUCTION

Q. Would you please state your name, address and position with Pittsfield Aqueduct Company, Inc.?

A. My name is Larry D. Goodhue. My business address is 25 Walnut Street, Nashua, New Hampshire. I am the Chief Executive Officer and Chief Financial Officer of Pittsfield Aqueduct Company, Inc. (the "Company" or "PAC"). I have been employed with the Company since December 2006. I am also the Chief Executive Officer and Chief Financial Officer of Pennichuck Corporation ("Pennichuck"), which is the corporate parent of PAC.

Q. Please describe your educational background.

A. I have a bachelor's in science degree in Business Administration with a major in Accounting from Merrimack College in North Andover, Massachusetts. I am a licensed Certified Public Accountant in New Hampshire; my license is currently in an inactive status.

Q. Please describe your professional background.

A. Prior to joining Pennichuck, I was the Vice President of Finance and Administration and previously the Controller with METRObility Optical Systems, Inc. from September 2000 to June 2006. In my more recent role with METRObility, I was responsible for all financial, accounting, treasury and administration functions for a manufacturer of optical networking hardware and software. Prior to joining METRObility, I held various senior management and accounting positions with several private and publicly-traded companies.

Q. What are your responsibilities as Chief Executive Officer of Pennichuck Corporation?

A. As Chief Executive Officer, I am responsible for the overall management of Pennichuck and its subsidiaries, including PAC, and I report to the Board of Directors. I work with the Chief Operating Officer, the Corporate Controller, Treasurer, Assistant Treasurer, Director of Water Supply, Chief Engineer, Distribution Manager, the Director of Human Resources and the Director of Information Technology to: (1) implement short and long-term financial and operating strategies, (2) insure the adequate funding of debt and expenses, and (3) enable Pennichuck's utility subsidiaries to provide high quality water service at affordable rates, on a consistent basis.

Q. Have you previously testified before this or any other regulatory commission or governmental authority?

A. Yes. I have submitted written testimony in the following dockets before the New Hampshire Public Utilities Commission (the "Commission"):

- Financings for PEU – DW 12-349, DW 13-017, DW 13-125, DW 14-020, DW 14-191, DW 14-282, DW 14-321, DW 15-044, DW 16-234, DW 17-055, DW 17-157, DW 18-132, DW 19-069 and DW 20-081;
- Financings for Pittsfield Aqueduct Company ("PAC") – DW 15-045 and DW 16-235;
- Financings for Pennichuck Water Works, Inc. ("PWW") – DW 14-021, DW 14-130, DW 15-046, DW 15-196, DW 16-236, DW 17-183, DW 19-026, DW 20-055, DW 20-064 and DW 20-157.

- Permanent and Temporary Rate Increase Proceedings for: PWW – DW 13-130, DW 16-806 and DW 19-084; PEU – DW 13-126 and DW 17-128; and PAC – DW 13-128.

II. PURPOSE OF THIS TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide information supporting PAC's request for temporary rate relief, permanent rate schedules, and request to modify PAC's ratemaking structure, including: (1) relevant historical information regarding the City of Nashua's acquisition of Pennichuck in early 2012; (2) information concerning how the ratemaking structure set forth in the Settlement Agreement approved by this Commission in Order No. 25,292 in Docket No. DW 11-026 has been operating since the 2012 acquisition; (3) information concerning PWW recent settlement modifying its ratemaking structure in Docket No. DW 16-806 and Docket No. DW 19-084, as well as for PEU in Docket No. DW 17-128, should be applied to PAC; and (4) information supporting the rate relief requested by PAC and the specific modifications to PAC's current ratemaking structure demonstrating that such requests are just, reasonable and in the public interest.

Q. Would you please identify the other witnesses in this case?

A. The other witness in this case, who is also providing written testimony in this proceeding, is Chief Operating Officer Donald Ware. This individual holds this role for both PAC and Pennichuck, as well as the other subsidiaries of Pennichuck. His testimony will describe his qualifications, history and previous instances of testimony before the Commission.

III. HISTORY AND IMPLICATIONS OF THE CITY OF NASHUA ACQUISITION

Q. Mr. Goodhue, before explaining the details of the proposed financings, would you please provide some history regarding the ownership of PAC and how that history supports PAC's request for approval of permanent and temporary rate relief?

A. PAC as a corporate entity is wholly-owned by Pennichuck, which is, in turn, is a closely-held private corporation that is wholly-owned by the City of Nashua, New Hampshire, as its sole shareholder. The City of Nashua acquired its ownership of Pennichuck on January 25, 2012, pursuant to this Commission's Order No. 25,292 (23, 2011) (Approving Acquisition and Settlement Agreement). Prior to this acquisition by the City of Nashua, Pennichuck's shares were traded on the NASDAQ public stock exchange. For purposes of my testimony, I refer to the period prior to the City's acquisition as "pre-acquisition" and the period after as "post-acquisition."

Q. Did the City's acquisition affect the way in which PAC operates as a utility?

A. Yes. The change in the ultimate ownership of PAC's parent, Pennichuck, from a publicly-traded investor-owned utility to ownership by the City has had important consequences for the operation of PAC. These same issues were involved with PAC's regulated sister companies, PWW and PEU which are also wholly owned by Pennichuck. As such, my testimony in PWW's recent rate cases, Docket No. DW 16-806 and Docket No. DW 19-084, as well as PEU's recent rate case in Docket No. DW 17-128, applies equally or substantially to this case. In light of the settlement regarding PWW's ratemaking methodology, I will be referring to PWW's rate cases in DW 16-806 and DW 19-084, or PEU's rate case under DW 17-128, throughout my testimony.

Q. What are the important similarities in the way the City's acquisition affected the operation of PAC and PWW or PEU?

A. One of the most important consequences is that PAC, PWW, or PEU, after the City's acquisition of Pennichuck, no longer have access to the private equity markets as a method of financing a portion of their capital needs. Companies that have access to the private equity markets, or Investor Owned Utilities ("IOU's"), where a 50/50 debt/equity ratio is considered optimal, but at an elevated cost to rate payers due to a return on equity needed to benefit public company shareholders, in the form of share value and appreciation and/or the regular and consistent payment of dividends to their shareholders.

As such, and as contemplated during the Commission's proceeding to approve the City's acquisition of Pennichuck in DW 11-026, after the acquisition, PAC, PWW, and PEU are expected to finance their on-going capital needs entirely and solely through the issuance of debt.

Q. Does reliance solely on debt to finance PAC's operations have impacts on PAC's customers?

A. Yes. As contemplated during the acquisition proceedings, one positive result of this anticipated debt financing is that the weighted cost of PAC's capital structure is significantly lower than it was prior to the City's acquisition, due to the elimination of the public company ROE dynamic discussed previously. As for PAC, this ROE existed at 9.75% post-tax pre-acquisition (approximately 16% pre-tax at Corporate tax rates in existence at that time, and approximately 12% pre-tax at current Corporate tax rates).

This lower cost of capital has had and will continue to have direct beneficial benefits for PAC's customers.

Q. Does reliance solely on debt to finance PAC's operations have consequences for PAC's rate setting methods and procedures?

A. Yes. As also contemplated in the acquisition Docket DW 11-026, the City's acquisition of Pennichuck and the resulting need to finance utility operations solely with debt has required modifications to PAC's (and Pennichuck's other utilities') ratemaking methods and procedures. As a result of this reliance on debt, PAC is much more dependent on the direct relationship of cash flow generated from rates, as it relates to the ongoing repayment of debt in support of ongoing capital investments. Under the previous ownership structure, the allowed return on public company equity allowed for extra cash generated to cover the repayment of debt obligations, as well as adequate coverage of operating expenses and dividend obligations to shareholders. This is even more important for PAC than it is for PWW or PEU, as both PWW and PEU have access to external debt financing for their capital project needs based upon the size of their financial operating levels, and the magnitude of their capital project needs. PAC, on the other hand, has no access to external debt funding except State Revolving Fund ("SRF") or Drinking Water and Groundwater Trust Fund ("DWGTF") loans for certain eligible projects, which may qualify from time to time. This causes an even greater reliance upon PAC's overall rate structure, in support of fully funding cash flow and working capital needs, in order to remain financially viable long term. While PAC has the ability to access funds from Pennichuck, as a part of the consolidated group, utilizing Pennichuck's Working Capital Line of Credit as a backstop for periodic and temporary or seasonal cash flow needs, its rates must produce sufficient cash to repay those borrowings, as Pennichuck is obligated by its lender to completely "clean out" and pay that facility down to $0 for at least 30 consecutive days in each calendar year.

Q. What is your opinion of the Company's specific business risk profile in comparison with the overall water utility industry?

A. There are a number of Company specific factors that need to be considered in evaluating its business risk profile relative to the entire water utility industry. The first factor is the Company's small size. Small size magnifies the impact of certain unavoidable fixed costs, such as: state and local property taxes; and, property & casualty insurance. Another factor magnifying the Company's business risk is its geographically small single-state service territory. Water companies that operate in multiple states across larger geographic areas are generally considered to have less business risk as they are less reliant on a single regulator or on the weather in a specific geography.

Q. Please explain financial risk and why that is important to the Company in meeting its long-term obligations.

A. Financial risk reflects the assessment of the Company's corporate financing policies and practices including, but not necessarily limited to: liquidity (i.e., credit lines), and debt capitalization and the ability to raise sufficient debt to finance necessary capital expenditures, in relation to the Company's operating and capital spending plans. More specifically, financial risk considers and seeks to measure the Company's ability to finance its capital additions program while meeting its debt obligations on a timely and consistent basis. Ratings agencies such as Moody's Investor Service, Standard & Poors, and others have developed a number of key ratios (credit benchmarks) which quantify financial risk by business risk category. Other things being equal, the higher the business risk the higher the credit benchmarks necessary to achieve an overall favorable credit rating. Certain aspects of the components of the Company's current rate structure, as defined under the Settlement Agreement for Docket No. DW 11-026, helps to mitigate some of this financial risk, including the establishment of the City Bond Fixed Revenue Requirement ("CBFRR") and the overall Rate Stabilization Fund ("RSF") funds from that Order, as defined later in this testimony.

Q. Does the Company have a bond credit rating for its debt?

A. No. The Company does not currently have a bond credit rating designated for its debt, as a stand-alone company. However, the Company completed discussions about the potential refinancing of its existing intercompany notes payable with a banking institution in 2013, and as a part of that process, the banking institution did an evaluation of the credit worthiness of PAC. This lender declined to offer replacement financing for PAC, for these intercompany notes, based upon the risk factors, and the business risk factors spoken about previously in this testimony.

Q. What factors support the Company's creditworthiness?

A. In discussions with potential lenders, PAC's credit risk rating does have certain favorable elements in existence, including: stability & predictability of the regulatory environment, cost and investment recovery (ability and timeliness), operational efficiency, scale of capital program and asset condition, overall organization structure, and its funding from operations compared to its debt position.

Q. With respect to the Company's creditworthiness, what challenges face the Company?

A. The Company faces several challenges, including: the Company's capital additions program; the need to properly maintain a program of ongoing infrastructure replacement; the need for adequate rate relief to maintain financial ratios and service existing and new debt; and, the small size of the Company.

Q. What are the primary factors needed to maintain an acceptable credit profile?

A. Certain elements of the Company's current rate structure, as provided for in DW 11-026, are important in giving PAC access to necessary low cost debt funding, needed to maintain its operations without any major disruptions, and to maintain compliance with potential financial covenants (as discussed earlier in this testimony). These elements include the CBFRR, the RSF, the inclusion of the Municipal Acquisition Regulatory Asset ("MARA") as an element of Generally Accepted Accounting Principles ("GAAP") basis equity, the prescribed formulaic approach to the allowed return on common equity (as discussed above), and the current corporate governance structure of Pennichuck and PAC.

It is important to note, however, that the RSF established in DW 11-026, only gave PAC access to those funds at PWW through intercompany borrowings, but did not provide for any basis of repayment of borrowed funds from the RSF (back to PWW), or the specific bifurcation of RSF funds exclusively for the usage by PAC. This is due in part to the fact that PAC's current rate structure does not include an element that includes the Company's ability to repay intercompany debt obligations to Pennichuck or PWW, as an element of its allowed revenues.

To address this problem, in DW 16-806, the bifurcation and reservation of specific RSF funds for PAC was approved. In this docket, we are seeking approval to accept those funds into PAC's rate structure, a modified rate structure for the further bifurcation of those funds to backup the three proposed buckets of allowed revenues (CBFRR, OERR, and DSRR), as was established for PWW in DW 16-806 and PEU in DW 17-128. We are also including intercompany debt obligations in the computation of the DSRR portion of allowed revenues, such that the Company's rate structure provides for the cash resources to service and repay those obligations.

Q. Why is an acceptable credit profile important to the Company, and what is being done in this case to provide for that?

A. An acceptable credit profile is important in that it allows the Company to continue to have access to debt funding, from its available sources. Even though the SRF and DWGTF programs do not include financial covenants like other commercial loan programs, if the Company is deemed not to be financially viable, even those funds will not be available to them for capital project investments. Additionally, as the Company's only other source of debt funding currently is intercompany borrowings from Pennichuck, it must maintain a level of financial viability that is accretive to the overall financial health of the corporate group, or access to those funds could be jeopardized. The implementation of the modified rate structures being sought in this case, as approved for PWW in Dockets No. DW 16-806 and DW 19-084, and PEU in Docket No. DW 17-128, are essential to provide PAC with a rate structure that is needed to provide for long term financial viability and an acceptable credit profile, as well as rate stability for its customers over the long term. This is not only important for PAC, but also important in its intercompany obligations to Pennichuck and

PWW, as PAC's ability to properly pay for intercompany usage of the resources provided from Pennichuck and PWW is vital to the overall credit worthiness of both Pennichuck and PWW, in their ability to comply with debt covenants, and maintain a credit rating that is accretive to the entire corporation group, which is beneficial to PAC and its customers. The overall impact of the modified ratemaking methodology being sought in this case, on the credit profile of the companies can be further explained by referring to supplemental testimony provided in DW 19-084 on August 21, 2019, and further clarification as submitted on October 9, 2019.

IV. RATEMAKING METHODOLOGY SETTLEMENT IN PWW'S RATE CASE, DOCKET NO. DW 16-806 AND DW 19-084, AND PEU'S RATE CASE, DOCKET NO. DW 17-128

Q. Mr. Goodhue, you noted the impacts of the City's acquisition of Pennichuck on its subsidiaries, PAC, PEU, and PWW, were similar. Please provide an overview of the relevant issues from PWW's 2016 and 2019 rate case, as well as PEU's 2017 rate case.

A. In PWW's Docket DW 16-806 and DW 19-084, as well as PEU's Docket DW 17-128, we were faced with many of the same issues that presently face PAC. The City's acquisition resolved almost a decade of intense disputes between the City and the pre-acquisition management of Pennichuck, and was premised on the assumption that the City's ownership of the utilities would produce consistently lower rates for ratepayers over time, as compared to the previous investor-owned utility structure. On July 19, 2017, the parties to Docket No. DW 16-806 filed a Settlement Agreement, which was approved by the Commission, which substantively updated the ratemaking methodology for PWW as adopted in Docket DW 11-026. Likewise, on July 18, 2018, the parties to Docket No. DW 17-128 filed a Settlement Agreement which substantially updated the ratemaking methodology for PEU as adopted in DW 11-026, and in conformity with the updated ratemaking methodology for PWW put in place in Docket No. DW 16-806. The Commission also approved this settlement. Additionally, on June 24, 2020, the parties to Docket No. DW 19-084 filed a Settlement Agreement which further updated the ratemaking methodology for PWW as adopted in Docket DW 11-026 and modified in Docket No. DW 16-806. This settlement was approved by the Commission. As is outlined in the DW 16-806 Settlement Agreement, Pennichuck's experiences since the DW 11-026 ratemaking methodology was approved demonstrated some deficiencies in that methodology, but our experience also provided a basis to understand what improvements to the methodology were needed. Those improvements are reflected in the DW 16-806 Settlement Agreement. The DW 16-806 Settlement Agreement is attached as Exhibit LDG-1 (excluding exhibits). The Settlement Agreement for the more recent revisions agreed to in DW 19-084 is attached as Exhibit LDG-2. The settlement contains a flow chart at pages 63-69 that is helpful in visualizing the ultimate goal of the changes to PAC's ratemaking structure.

Q. What are the primary benefits of the modified rate structures approved under the DW 16-806, DW 17-128, and DW 19-084 Settlement Agreements, as it pertains to PAC?

A. The modifications to PAC's ratemaking structure will increase PAC's ability to provide for adequate cash flows to repay its debts, and will provide lenders with the confidence in PAC's ability to repay its debt obligations, all of which is fundamental for PAC to be able to continue to access needed debt for infrastructure replacement and operations. This is especially important for PAC, with its inherent limitations to access of external debt financing, as addressed earlier in this testimony. As such, their ability to meet their cash flow needs is vitally important in the Company's ability to repay any SRF or DWGTF loan obligations and/or the repayment of intercompany loan obligations to Pennichuck, as its only other source of internal debt financing, which is dependent upon the corporation as a whole being able to meet its debt and covenant compliance obligations, all of which are dependent upon rates that provide for an adequacy of bottom line profitability and cash flow liquidity.

Q. Did the Parties to the DW 16-806 Settlement Agreement anticipate that the modified rate structure would also apply to PAC?

A. Yes. The Settlement Agreement specifically includes the following provision on pages 14-15:

> "*The Settling Parties agree that the current $5,000,000 Rate Stabilization Fund (RSF) maintained by PWW, which was established under the Original Rate Structure, should be re-allocated amongst the three Penn Corp utilities such that PWW's allocated share of the RSF shall now be $3,920,000, with the remaining balance of $1,080,000 to be allocated between PEU and PAC. The allocation to PWW is based on the respective three utilities' last Commission approved revenue requirements as detailed on* Exhibit 6 *of this Settlement Agreement. The Settling Parties agree that the $1,080,000 portion of the RSF that is proposed to be allocated between PEU and PAC shall remain in PWW's RSF cash account until such time that rate case filings are made for PEU and PAC. At that time, the modified rate structure for PWW that is proposed in this settlement agreement will also be requested as the proposed rate structures for both PEU and PAC. If the respective rate structures for PEU and PAC are approved by the Commission, the $1,080,000 will then be transferred from PWW's RSF funds to the respective RSF funds to be established in PEU and PAC.*"

It is important to note that included in the Settlement Agreement and subsequent Order affirming that Agreement in Docket No. DW 17-128 for PEU, that the $980,000 referenced above for funds to be transferred to PEU, was affirmed and put in place subsequent to that Order's issuance. The $100,000 reserved for PAC remains at PWW awaiting an approval for a transfer of those RSF funds to PAC, as a part of this proceeding.

Q. Is PAC now seeking to implement the same ratemaking structure described in the 16-806 Settlement Agreement, as well as the further modifications approved for PWW in 19-084?

A. Yes. This is the ideal time for the new ratemaking structure to apply to PAC. PAC currently has a need to fully cover its cash flow obligations and provide for overall covenant compliancy within the corporate group. This is especially important, as under its existing rate structure, given the fact that PAC's depreciation lives are well in excess of its debt instrument lives, giving rise to the fact that the cash flow generated from depreciation does not fully meet the principal repayments on issued debt, either to outside lenders such as the SRF or DWGTF, or as a repayment of funds on intercompany loans used to fund de minis and ongoing "run rate" capital expenditures for PAC. This is especially important in the upcoming year or more, as the New Hampshire Department of Environmental Services ("NHDES") has worked with the Company on a required need to bring certain capital projects to bear, which will provide for a safety net for water supply to the system in the Town of Pittsfield. Currently that infrastructure contains a single water main that runs down Catamount Road on the northern side of the PAC water system, into the downtown area where the distribution system exists. Should a failure occur on that line, the entire system would be out of water, which would be extremely problematic for a number of reasons. The Company did attempt to install a duplicate main down Catamount Road, but the NHDOT rejected the installation. In the alternative, within the next several years, the NHDES is seeking to have PAC install a water tank on the southern side of the Suncook Highway to provide for storage and supply, should a main break occur on the single watermain located on Catamount Road. Given this individual circumstance, it places even more importance on the need to secure a modified rate structure for PAC, which will fully support the cash flows of the Company, giving it the ability to fund its ongoing operating costs, as well the service of its external debt payments, including the anticipated SRF or DWGTF loan for this new tank.

Additionally, as PAC has no current access to the RSF funds through PWW because it has no approved ability to repay any monies borrowed from those funds, the new ratemaking methodology is needed to: (1) insure adequate EBITDA coverage for PAC, as it relates to covenant requirements for itself or the corporate group as a whole; (2) provide adequate cash flows from revenues to pay debt service, CBFRR and operating expenses; and (3) provide adequate support funds in the form of the RSF accounts, to provide for cash funding during times of revenue shortfalls and expense growth above inflationary levels between rate case filings.

Q. Of the $1,080,000 of RSF funds to be transferred from PWW to PEU and PAC, how much is reserved for PAC, and please explain whether that amount is insufficient to fully fund those RSF accounts and how does the Company anticipate handling the full funding of those accounts.

A. Of the $1,080,000 in RSF funds available from transfer from PWW to PEU and PAC, $980,000 is reserved for PEU and $100,000 for PAC. As delineated in Mr. Ware's testimony in support of this filing, the calculated need to fully fund the new RSF accounts is $186,000. As such, the available transferrable cash funds are $86,000 short of the overall assessed need at this time. This shortfall is anticipated to be funded in one of the following ways: (1) if the Material Operating Expense Factor ("MOEF") is approved as a rate structure element in this case, then the Company will only seek funding of the RSF accounts to the imprest level of $100,000 at this time, or (2) if the MOEF is not approved in this case, then it will seek full funding to the $186,000 imprest level by refilling the RSF funds to their required levels over the next three years via a deferred debit included as an element of the allowed revenues in this case.

V. OVERVIEW OF REQUESTS FOR RATE RELIEF AND MODIFICATIONS TO PAC'S RATEMAKING STRUCTURE

Q. Mr. Goodhue, before describing the details of the proposed request for permanent rate relief, could you provide an overview of the nature of the proposal?

A. The proposed rate relief proposal consists of two principal components. First, as set forth in our full rate filing materials which are described in more detail by Mr. Ware in his testimony, PAC is requesting an increase in annual revenues of approximately $86,783, or 11.18%. The second, component of PAC's requested relief is its request, as I described above and as is set forth in PAC's Petition for Further Modifications in Ratemaking Structure, for approval of the modified ratemaking methodology as was applied to PWW in Docket No. DW 16-806 and Docket No. DW 19-084. Adopting the

DW 16-806 and DW 19-084 modified ratemaking methodologies would allow PAC to provide adequate cash flow to cover its overall cost of operations, including prudent operating expenses and debt service costs, and provide its debt lenders with reasonable expectations of future rates that are directly related in a common sense way to PAC's long-term, post-acquisition capital requirements which rely on entirely on debt. To restate this, essentially these modifications expressly acknowledge that PAC's reliance on debt financing requires a ratemaking method that is based on a fixed multiple of the annual debt service on existing debt, with the balance of the allowed revenue requirement tied to coverage of prudent, normal and ongoing operating expenses.

Q. Mr. Goodhue, in practical terms, what would be the impact on the average residential monthly bill if all aspects of PAC's proposed rate relief were approved by the Commission?

A. Overall, the average single family residential monthly bill is currently $58.12. Our requested rate increase would increase the average base amount in a customer's bill by approximately $6.50 per month, bringing the average monthly bill to $64.62.

VI. SUMMARY OF PROPOSED RATE RELIEF AND IDENTIFICATION OF PROPOSED MODIFICATIONS TO PAC'S RATEMAKING STRUCTURE

Q. Mr. Goodhue, would you please briefly describe the rate relief requested in this proceeding by PAC?

A. As is summarized above, with the filing of its full rate case documents as required by the Commission's administrative rules, PAC is requesting the Commission to approve, pursuant to its general permanent rate-setting authority, a rate increase of 11.18%, bringing its allowed revenues to a projected level of $862,927, as detailed in PAC's rate case filing at Tabs 12 and 13.

Q. Is PAC requesting a step increase in this proceeding?

A. No. PAC is not requesting a step increase in this proceeding. It is, however, filing for temporary rates at current rates. A filing and testimony requesting this has been prepared and is being filed contemporaneously with the filing of all other documents to this proceeding.

Q. Is the rate increase the only relief that PAC is seeking in this proceeding?

A. No. For the background reasons explained earlier in this testimony, PAC is also requesting that the Commission approve, pursuant to its general ratemaking authority, such modifications to the ratemaking methodology for PAC that it approved for PWW in DW 16-806 and DW 19-084, and as adopted by PEU as approved in DW 17-128. Please see PAC's Petition for Further Modifications to Ratemaking Structure at Tab 11. As described below, in order to provide a clear factual basis for the Commission's review of the proposed modifications, PAC has prepared its ratemaking schedules to reflect not only the operation of the current ratemaking method as established by the Commission in DW 11-026, but also operation of the modifications requested by PAC in its petition under the methodology approved in DW 16-806 and DW 19-084. The rate increase being requested by PAC in this case is based on the DW 16-806 and DW 19-084 modified methods reflected in the ratemaking schedules.

Q. Would you briefly describe the basis for this requested rate relief in more detail?

A. The fundamental basis for this request is that it represents the revenues required to cover PAC's current operating expenses and to meet the demonstrated costs of servicing PAC's direct debt obligations plus its share of the CBFRR. PAC has prepared its ratemaking schedules to demonstrate this fundamental basis. This overall rate increase also included the implementation of the modified rate structure elements approved for PWW in DW 16-806 and DW 19-084, and PEU in DW 17-128, exclusive of the QCPAC program. These include:

- An OERR revenue component of allowed revenues, in its elemental pieces of an MOERR, and NOERR and an MOEF, with the associated MOERR RSF fund;
- A DSRR-1.0 revenue component of allowed revenues, along with the associated DSRR RSF fund;
- A DSRR 0.1 revenue component of allowed revenues;
- A five-year average test period to replace a single test year;
- Actual NH Business Enterprise Tax cash payments to be included in the OERR portion of allowed revenues;
- Prioritization of the usage of the DSRR 0.1 funds;
- The recovery and inclusion of SFR and DWGTF debt issuance costs in the Company's allowed revenues; and
- The re-establishment of imprest levels of RSF accounts, as a reconciliation mechanism.

Q. Please describe how the five-year averaging PAC is requesting in this proceeding works under the modified rate methodology.

A. The purpose of the five-year averaging is to develop pro forma test year data regarding revenues and expenses which is less likely to reflect unusual or abnormal events, such as a uniquely dry or wet summer. Under the DW 16-806 modified rate methodology, the "test year" revenues use the trailing five-year average consumption at the most recently approved volumetric rates and fixed charges. The five-year trailing average consumption determination shall be based on the four calendar years immediately preceding the designated test year for which the rate case is filed as well as the test year itself. Additionally, all direct test year expenses which are affected by differences in consumption, including but not limited to purchased water expense, electricity expense, and chemical treatment expense, also include pro forma adjustments to reflect the pro forma difference in consumption between the five-year average and the test year. Although the modified methodology includes this five-year average test period for computing its revenue deficiency, the prior Settlement Agreements that recommended this five-year average specifically states that neither Staff nor the OCA are precluded from making an alternative recommendation in place of the five-year average with respect to the determination of revenue deficiency.

Q. Please describe how you are asking the five-year average be implemented for PAC.

A. We plan to calculate the full effect of the five-year average for the 2019 test year under this rate case and include that pro forma calculation into this filing.

Q. Please explain why PAC needs rate relief at this time?

A. First, PAC has invested approximately $409,000 in capital improvements and infrastructure replacements since its last filed rate case for test year 2012 under Docket No. DW 13-128, and the current rates do not include the necessary dollars in the existing revenue requirement to fund the repayment of those debt instruments, for both principal and interest. Second, operating expenses of the Company have increased at or above the rate of inflation, as well as increases in property taxes, since that last filed permanent rate filing. In the case of property taxes, the Company does proactively process abatements for valuations that are deemed to be in excess of allowed or reasonable levels, given the current RSA allowing for the taxation of Utility Property as Real Property at both the State and Local level. Since its last rate case, PAC successfully negotiated a settlement for property taxes with the Town of Pittsfield, for which the results of that settlement is included in the operating expenses included in the filing schedules in support of the requested revenue increase herein. Overall, the rate case being pursued at this time is necessary to provide for the ongoing cash flow needs to fund ongoing operating expenses and fund the repayment of debt obligations, as available to PAC in support of its ongoing obligations to its ratepayers.

VII. RATEMAKING SCHEDULES ARE FORMATTED PURSUANT TO PAC'S CURRENT AND PROPOSED RATEMAKING METHDOLOGY

Q. Please discuss the format of the ratemaking schedules filed by PAC upon which the requested rate relief is based.

A. PAC's requested rate relief is based on the modified ratemaking structure set forth in its filed ratemaking schedules. As further described in the testimony of Mr. Ware, these schedules embody financial information and resulting rates attributable to three distinct scenarios: (1) application of the modified ratemaking structure approved by this Commission in DW 11-026; (2) application of this modified ratemaking structure including the modifications described in DW 16-806 and DW 19-084; and (3) application of ratemaking models assuming that PAC were still an investor-owned utility. PAC's requested rate relief is based upon the DW 16-806 and DW 19-084 modified ratemaking structures.

Q. Mr. Goodhue, how do the rates resulting from applying the DW 16-806 and DW 19-084 modifications to PAC's ratemaking structure compare to the rates that would result from application of the existing modified ratemaking structure approved by the Commission in DW 11-026?

A. As indicated in Mr. Ware's testimony and on Exhibit DLW-1, Tab 12 (Customer Impact), the projected aggregate revenues estimated to be allowed under the current modified ratemaking methodology (DW 11-026) would be $820,922, a percentage increase over the test period revenues of 6.35%. In contrast, as shown on the same Exhibit, the projected aggregate revenues estimated to be allowed when the DW 16-806 and DW 19-084 modifications are applied (including the implementation of the Material Operating Expense Factor, or MOEF) would be $862,927, a percentage increase over the test period revenues of 11.18%. This overall increase, for the seven- year period from the last test year of 2013, through the test year for this case of 2019, is approximately 1.5% per annum, compounded, which is at or below the annual rate of inflation for the region for that period of time.

Q. If the current DW 11-026 methodology would result in a 6.35% increase, why are you asking the Commission to modify the methodology which results in a 11.18% increase?

A. The current ratemaking methodology does not permit PAC to pay its obligations. As I described in my testimony above, PAC's depreciation lives are well in excess of its debt instrument lives. This means that the cash flow generated from depreciation does not fully meet the principal repayments on issued debt. Additionally, the new methodology is needed to: (1) insure adequate EBITDA coverage for PAC, as it relates to covenant requirements for itself or a member of the consolidated corporate group, for which is its source of working capital and intercompany loan funding, (2) provide adequate cash flows from revenues to pay debt service, CBFRR and operating expenses, and (3) provide adequate support funds in the form of the RSF accounts, to provide for cash funding during times of revenue shortfalls and expense growth above inflationary levels between rate case filings. In summary, if PAC continues to operate under the current DW 11-026 ratemaking methodology, the Company will become financially insolvent, especially as it relates to possible capital project needs in the immediate future of a material nature, for which its current rate structure would not provide adequate cash resources to support and repay.

Q. Mr. Goodhue, can you provide a projection of how PAC's rates would increase under the proposed modified ratemaking methodology in the future?

A. The Company anticipates rates would increase at approximately the rate of inflation going forward. This is based upon the following assumptions: (1) the CBFRR revenues of the Company will remain at a fixed level until 2042, (2) normal operating expenses will increase at approximately the rate of inflation, (3) property taxes may continue to increase at rates of inflation or greater per annum, and (4) the Company will be investing \$100,000-\$150,000 annually on capital and infrastructure improvements, at borrowed interest rates of between 2.5-4.5%, with the exception of the new tank anticipated for construction in 2022 at an estimated cost of \$800,000, as well as enhancements to its water treatment facility to meet NHDES and Environmental Protection Agency ("EPA") regulations in that same year at a cost of approximately \$200,000. These increases would be supported in the new rate structure under the DSRR component of the allowed revenues, and then "trued-up" for increases in operating expenses with rate cases filed about every 3 years, to reset permanent rates, and to refill or refund monies from the RSF accounts. Unlike PWW or PEU, PAC is not seeking a QCPAC program. This is because PAC plans to time the completion of its major capital projects, which are over and above "run rate" capital project investments in the next anticipated test year, for which temporary rates or a step increase could be sought, with expected increases in fully-reconcilable permanent rates in future rate case.

Q. How would these projected resulting rates compare to the rates that would likely have resulted under private ownership?

A. These rates would continue to be lower than rates under private ownership as a subsidiary of a publicly-traded investor owned utility. This is based upon the fact that the Company's cost of debt is only 2.5-4.5% currently, whereas under that ownership structure, PAC earned a ROE of approximately 16% pre-tax (at corporate tax rates at that time, approximately 12% at current corporate tax rates), on approximately 50% of its investments in infrastructure.

Q. Has PAC prepared a cost of service study in connection with this filing?

A. No. PAC is not seeking any change in rate design in this proceeding. There have not been any significant changes in the composition of PAC's customer base, and therefore PAC does not believe that a Cost of Service Study is required.

Q. Has PAC provided PAC's payroll figures?

A. PAC does not have its own employees. Instead it pays PWW a management fee under which PWW provides employee services to PAC. The management fee is shown in Tab 12 at Sch 1 Attach C, Page 2.

Q. Will PAC be seeking a temporary rate increase?

A. Yes. PAC will be seeking temporary rates at current rates, as indicated earlier in this testimony. The Company is filing for this to preserve its rights to full recoupment of new permanent rates back to the statutorily allowed timeframe calculated from the date of notice to customers. The Company is not seeking any temporary rate relief above its current rates. The basis for the temporary rate request is described in separate testimony to be offered jointly by Mr. Ware and me that supports PAC's petition for temporary rates.

VIII. NOTICE TO CUSTOMERS

Q. Please describe PAC's efforts to communicate with the affected communities and customers relative to this filing.

A. As a matter of normal practice PAC will be communicating in writing with officials at the Town of Pittsfield contemporaneous with the filing of this case. This communication will be including the Town Manager of Pittsfield, as well as the slate of State Senators and Representatives for that community. This communication was not done prior to this filing due to certain limitations on effect and timely communication during this period of COVID-19 alternate operations for the Company and the community served.

Accompanying the required notice to customers, which will be sent to customers in conformity with the regulations after this case is filed, we will be sending a Frequently Asked Questions ("FAQ") document providing information about PAC's rate increase request.

IX. REQUIRED APPROVALS AND CONSENTS

Q. Would you please identify any approvals and consents required to affect the rate relief and proposed modifications to PAC's ratemaking structure?

A. The principal approval required to effect the requested permanent rate relief and proposed modifications is the approval of this Commission under RSA 378:8 and :28. The requested rate relief and proposed modifications have already been addressed and approved in overall intent and concept by PAC's and Pennichuck's Board of Directors.

X. JUST AND REASONABLE FINDING AND CONCLUSION

Q. Mr. Goodhue, do you believe that PAC's proposed rate relief and application of the modifications to the ratemaking structure described in DW 16-806 and DW 19-084 will result in just and reasonable rates?

A. Yes. I believe the requested rates and the proposed modifications are just and reasonable for several reasons.

First, the requested rates, including the effects of the proposed modifications to PAC's ratemaking structure, are generally consistent with the long-term projections presented in DW 11-026, which assumed an average annual increase in rates of approximately 3% and with the fundamental premises underlying the Commission's approval of the City of Nashua's acquisition of Pennichuck and its utilities. While the rate increase requested in this proceeding, which reflects the cumulative revenue and operating requirements of seven years with no permanent rate relief, is significant, when the cumulative increase is examined as an average annual increase, it is generally consistent with, or is actually below, the original assumptions of the acquisition docket, giving consideration to the fact that property taxes have increased at a rate above levels contemplated at that time.

Second, the requested rates continue to be lower than the levels that are reasonably projected to result from continued private investor ownership under the pre-acquisition structure. This benefit to ratepayers, which was one of the principal reasons for the approval of the City's acquisition, is due in large part to the fact that PAC has been migrating to a utility that will finance all of its material capital needs by the issuance of debt, which results in a materially lower weighted cost of capital than a private investor-owned utility with a more traditional debt and equity capitalization.

Third, the requested rates are necessary to maintain PAC's ability to continue to provide safe and high-quality water service, by financing continued reasonable and prudent operations and by having access to borrowed funds necessary to finance required capital assets and infrastructure.

Fourth, the requested modifications to PAC's current ratemaking structure are the result of a careful examination of the experience obtained through the multiple major debt financings completed for its sister subsidiary, PWW, as well as covenant compliancy issues experienced by both PWW, PEU and its parent Pennichuck Corporation. This experience allowed PWW to develop the specific modifications proposed and approved in DW 16-806 and DW 19-084, and further to have confidence that these modifications will enhance the ability of PWW, PEU and PAC to access debt markets and/or term loans in the future at affordable interest rates and at reasonable covenants. In some ways, this experience was an important prerequisite to developing the specific proposed enhancements, which is why PWW pursued the modified rate structure first in DW 16-806 and further modified it in DW 19-084, with the full expectation that this methodology would then be applied to both PEU and PAC in their next rate case filings.

Fifth, based on the ratemaking schedules filed by PAC as part of this rate case, the requested rates will demonstrably enable PAC to generate sufficient cash flows to support its ongoing operational and capital needs, as well as service its existing outstanding debt obligations.

Q. Mr. Goodhue, do you believe that the requested rate relief and adoption of the proposed modifications are required to ensure that PAC continues to be able to provide safe and high-quality water service to its customers?

A. Yes. PAC's current ratemaking structure only provides a fixed coverage component in the revenue requirement for the repayment of principal and interest to the City of Nashua under the CBFRR. Without an equity return allowable to the Company, PAC does not have a rate structure which ensures adequate cash flow coverage to cover all of its remaining operating expenses and the repayment of principal and interest on the balance of its debt obligations. This is further exacerbated by the fact that the cash flow generated from depreciation under the return on rate base is funded by assets with an average composite life of approximately 39 years, with some assets at 85 year lives. This cash flow is what is intended to provide the cash flow to repay the principal on debt used to fund the investment in rate base. However, the maximum life of debt available to PAC is 30 years. As such, the cash flow from depreciation is insufficient to cover the principal repayment cash flow requirements. Additionally, without the free cash flow generated by a return on equity, when PAC experiences reductions in revenue related to weather related and other consumption anomalies, or its expenses increase over time associated with inflation or other pressures, its revenues are not sufficient to meet the fixed operating expenses of the Company. The cost of debt service for PAC, even at favorable interest rates to the long term benefit of ratepayers, coupled with the increase of operating expenses due to normal inflationary pressures, as well as increases above inflationary levels for certain expense items (i.e. State and local property taxes), has and/or will create a mismatch between the cash flow generated from a normal allowed rate of return and depreciation expense on rate base, to the coverage of the cash flow requirements of PAC's principal and interest payments and normal operating expenses. This inherent mismatch which exists for PAC under the existing ratemaking structure (as a nearly 100% debt financed entity), coupled with the regulatory lag of obtaining rate relief 12-18 months after a given test year and a typical time frame of three years between rate cases has created and will continue to result in the revenues allowed from traditional ratemaking being insufficient to generate the necessary operating cash flows required to cover all of the Company's operating expense and debt service needs, now and into the future. The requested rate relief and proposed modifications to PAC's ratemaking structure are precisely targeted to correct these deficiencies.

Q. Mr. Goodhue, does this conclude your testimony?

A. Yes, it does.

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 16-806

Pennichuck Water Works, Inc.
Request for Change in Rates

2016 RATE CASE

SETTLEMENT AGREEMENT

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 16-806

PENNICHUCK WATER WORKS, INC.

REQUEST FOR CHANGE IN RATES
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Filing Index

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

DW 16-806

Pennichuck Water Works, Inc.

Petition for Change in Rates

SETTLEMENT AGREEMENT

This Settlement Agreement is entered into this 19th day of July, 2017 (the "Agreement"), by and among Pennichuck Water Works, Inc. ("PWW") (a subsidiary of Pennichuck Corporation ("Penn Corp"), the Staff of the New Hampshire Public Utilities Commission ("Staff"), and the Office of Consumer Advocate ("OCA"), with the intent of resolving all of the issues in the above-captioned docket. (The parties are referred to collectively in this Agreement as the "Settling Parties.")

I. PROCEDURAL HISTORY

A. On August 7, 2016, PWW filed a Notice of Intent to file rate schedules.

B. On September 23, 2016, the OCA filed notification with the Commission of its participation in this docket.

C. On September 26, 2016, PWW filed with the Commission formal petitions for permanent and temporary rates, along with testimony and supporting schedules. PWW also sought approval for certain modifications to the ratemaking protocols established and approved in the *Joint Petition of City of Nashua, Pennichuck Corporation et al, for Approval to Acquire*

Stock in Pennichuck Corporation, Order No. 25,292 (November 23, 2011) (the "Acquisition Order") in docket DW 11-026.

D. PWW's Permanent Rate Petition proposed a permanent increase in its water revenues (exclusive of Water Infrastructure and Conservation Adjustment (WICA) surcharge revenues)[1] of $4,907,916, or 17.21%, resulting in an overall permanent revenue requirement of $33,432,344. The proposed revenue increase was comprised of a calculated revenue deficiency of $2,242,509, based on a pro forma 2015 test year, as well as an additional $2,665,407 in revenues from a proposed step adjustment, based on capital improvements that were anticipated to be completed and used and useful by December 31, 2016. PWW's Temporary Rate Petition requested approval for a proposed temporary rate increase of $1,771,116, or 6.21%.

E. On October 25, 2016, the Commission issued an Order of Notice suspending PWW's proposed revised tariff pages and scheduling a prehearing conference and technical session for November 21, 2016.

F. Subsequent to the November 21 prehearing conference, the parties conducted technical sessions during which PWW's request for temporary rates and a proposed procedural schedule were discussed.

G. On December 5, 2016, the Staff, on behalf of the other parties, filed a proposed procedural schedule with the Commission. On December 13, 2016, the Commission issued a Secretarial Letter approving the proposed procedural schedule.

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[1] During the test year, PWW earned a total of $29,298,819 in revenues from water sales. This amount is comprised of $28,920,120 in permanent rate / special contract revenues, $367,548 in WICA surcharge revenues, and $11,151 in water resale revenues. Because the WICA revenue is earned via a billing surcharge and is not included in the permanent rates charged to customers, WICA revenues have been excluded for purposes of establishing individual customer rates. However, pro forma test year WICA surcharge revenues were taken into account relative to the establishment of PWW's overall revenue requirement.

H. PWW, the Staff, and the OCA (the Settling Parties) reached an agreement on the issue of temporary rates, which was filed with the Commission on December 8, 2016 (the "Temporary Rate Settlement Agreement"). In that agreement, the Settling Parties proposed that PWW should be authorized to implement temporary rates at the same level as current rates during the pendency of the rate proceeding. Additionally, the Settling Parties proposed that temporary rates be made effective on a bills-rendered basis on and after December 7, 2016.

I. At a hearing held on January 17, 2017, the merits of the Temporary Rate Settlement Agreement were presented before the Commission by the Settling Parties. On February 17, 2017, the Commission issued Order No. 25,990 granting approval of the proposed Temporary Rate Settlement Agreement.

J. During the course of the proceeding, the Staff and the OCA served numerous data requests on PWW, to which PWW provided responses. The parties to the proceeding also held a number of technical sessions in order to supplement the written discovery that was conducted.

K. On April 26, 2017, on behalf of the parties in the proceeding, Staff filed an Assented to Motion to Suspend the Procedural Schedule so as to enable the parties to continue the discussions necessary to reach a joint settlement on all issues relevant to this case. On April 27, 2017, the Commission issued a Secretarial Letter approving Staff's Motion to Suspend the Procedural Schedule.

II. RELEVANT BACKGROUND

A. Acquisition and Ownership by the City of Nashua.

1. PWW is a regulated public utility that is wholly-owned by Penn Corp, which is, in turn, a corporation that is wholly-owned by the City of Nashua, New Hampshire (the "City"). The City acquired its ownership of Penn Corp on January 25, 2012, pursuant to the

Acquisition Order. In addition to PWW, Penn Corp also owns two other water utilities: Pennichuck East Utility, Inc. (PEU) and Pittsfield Aqueduct Company, Inc. (PAC).

2. The Acquisition Order approved a settlement agreement among the parties to DW 11-026 (the "DW 11-026 Settlement Agreement"), subject to certain conditions. Among other things, the settling parties to the DW 11-026 Settlement Agreement recommended that the Commission approve the City's acquisition of Penn Corp, approve a modified ratemaking structure for Penn Corp's three water utilities (including PWW), approve the establishment of a $5,000,000 Rate Stabilization Fund ("RSF") to be maintained by PWW, and approve certain accounting matters and limitations on dividends and distributions from the three utilities to Penn Corp. These special provisions were instituted in order to allow the three utilities to have "rates at levels that are sufficient to enable each utility to meet their operating requirements and to satisfy each utility's apportioned share of responsibility to pay the debt service arising from the City Acquisition Bonds."[2] (See DW 11-026 Settlement Agreement at 8.)[3]

B. Post-Acquisition Financings and Experience.

1. Subsequent to the City's acquisition, Penn Corp's management has pursued several debt financings for its utilities. These financings have included the issuances of up to $54,500,000 in debt by PWW which is described in Commission Order No. 25,734 (November 7, 2014) in docket DW 14-130 and of up to $25,500,000 in debt by PWW described in Commission Order No. 25,808 (September 2, 2015) in docket DW 15-196. The negotiation and completion of these financings has provided Penn Corp's management with actual

[2] The rate component representing PWW's acquisition bond repayment obligation is described as the "City Bond Fixed Revenue Requirement" (CBFRR). During the test year, PWW's CBFRR was $7,465,139.

[3] An example of the rate-making methodology described in the DW 11-026 Settlement Agreement is shown on Settlement Attachment JPL-1, Schedule 1 – Original Rate Structure.

experience as well as direct input and insights from the capital markets (i.e., lenders) regarding the response to the ownership of Penn Corp by the City, in addition to the operation of the utilities and the ratemaking methodology approved in the Acquisition Order within the new ownership structure.

2. The change in the ultimate ownership of Penn Corp, from a publicly-traded investor-owned utility to ownership by the City has had many important consequences, including the fact that Penn Corp and its three utilities no longer have access to equity financing markets as a means of financing its capital and operating needs. Accordingly, Penn Corp and its utilities are now required to finance their on-going capital needs entirely through the issuance of debt.

3. Based on the experience of Penn Corp's management since the City's acquisition, as described in PWW's testimony in this as well as the prior two financing dockets identified above, PWW is now seeking modifications to the ratemaking structure approved in the Acquisition Order as well as an increase in its permanent rates as determined pursuant to the proposed modified ratemaking structure. The Settling Parties agree that, for the reasons described in PWW's testimony as supplemented through discovery, modifications to PWW's ratemaking structure will not only increase PWW's required access to the credit markets, but also will more than likely result in an enhanced credit rating. Thus, PWW will be able to access lower cost debt, which will ultimately be to the benefit of ratepayers.

III. TERMS OF THIS SETTLEMENT AGREEMENT

The Settling Parties agree and recommend action by the Commission in the form of approving the following:

A. Revenue Requirement, Permanent Rates, and Step Increase.

1. The Settling Parties agree to a total revenue requirement for PWW in the amount of $31,496,789 as calculated based on the proposed modified rate structure. (See "C. Modifications to Ratemaking Structure" below.) In deriving this revenue requirement, the Settling Parties agree to a permanent rate increase of $887,591, or 3.12%, based on pro forma test year 2015, as well as a step increase of $2,186,127, or 7.69%, based on 2016 and certain 2017 plant additions which will be fully in service and used and useful at the time such rates are implemented.[4] The components of PWW's total proposed revenue requirement are summarized on Exhibit 1.[5] The proposed rate increases for each of PWW's rate classes are shown in Exhibit 2.

2. The Settling Parties agree that the underlying costs of the 2016 and 2017 plant additions upon which the proposed step adjustment is based shall be audited by the Commission Audit Staff prior to the implementation of customer rates. The Settling Parties agree that certain 2016 WICA related plant additions have previously been reviewed by the Commission Audit Staff relative to PWW's WICA filing in docket DW 17-017 and that the Commission Audit Staff issued a report of its examination on such dated March 24, 2017. A copy of that Audit Report is included in this Settlement Agreement as Exhibit 3. The Settling Parties agree that the Audit Staff shall issue a Final Audit Report based on its examination of the remaining 2016 and 2017 plant additions, and that if such report reveals a material difference between the actual underlying costs of those assets and the asset costs upon which the proposed

[4] Settlement Attachment JPL-1, Schedule 9 indicates that PWW invested a total of $20,124,921 in used and useful plant additions during 2016. These plant additions were financed by various loans which appear on Schedule 1C-Step of Attachment JPL-1. The debt service associated with these loans is included in the total revenue requirement being proposed for PWW. However, as of 12/31/16, a total of $2,795,188 in loan proceeds were unexpended relative to PWW's BNY Mellon-2014 Series A Bond issuance, but have since been expended in order to finance various projects which were completed and became used and useful during 2017.

[5] The calculations of the permanent rate increase and the step increase are fully detailed in Settlement Attachment JPL-1 and summarized on Schedule 1 – Modified Rate Structure of that attachment.

step adjustment is based, an appropriate adjustment in the proposed step adjustment shall be recommended to the Commission for approval.

3. The Settling Parties agree that this represents a reasonable compromise of all issues relating to the revenue requirement pending before the Commission for the purposes of permanent rates and the step adjustment, including, but not limited to, debt service, pro forma adjustments, capital additions, and operating expenses. As the sums expressed above are the result of compromise and settlement, they are liquidations of all revenue requirement issues and do not constitute precedent regarding any particular principle or issue. The Settling Parties agree that the revenue requirement recommended to the Commission results in rates for PWW's customers that are just and reasonable.

B. Effective Date for Permanent Rate and Step Adjustment.

1. The Settling Parties agree that the permanent rate increase of $887,591, or 3.12%, shall be effective on a bills-rendered basis on and after December 7, 2017 in accordance with the Temporary Rate Settlement Agreement approved by Commission Order No. 25,990. In order to reconcile the difference between temporary rates and permanent rates, the Settling Parties agree that PWW should be authorized to either refund or charge customers an amount equal to the difference between the revenues PWW would have collected had the agreed upon level of permanent rates been in effect for bills rendered on and after December 7, 2016, and the actual revenues collected during the temporary rate period, inclusive of the WICA surcharge. Specifically, with regard to PWW's "Core Water System" customers, who have been assessed the WICA surcharge, PWW will either charge or refund the calculated difference within a one billing-month period. However, with regard to PWW's "Community Water System" customers,

who have not been assessed the WICA surcharge, PWW will either charge or refund the calculated difference over a twelve billing-month period.

2. Upon the issuance of a Commission order approving this Agreement, PWW agrees to file, within 30 days of such, a calculation of the temporary-permanent rate recoupment and surcharge recommendation for Commission review. PWW shall also provide a copy of its calculation and recommendation to the OCA. The refunds or surcharges shall be calculated based on each customer's actual usage and reflected as a separate item on all customer bills. Upon receipt of the Commission's order on PWW's proposed temporary-permanent rate recoupment, PWW agrees to file, within 15 days of such, a compliance tariff supplement including the approved refund or surcharge relating to the total recoupment of the difference between the level of temporary rates and permanent rates, as well as the average monthly refund or surcharge for each customer class based on customers' individual usage.

3. The Settling Parties agree that the step increase described in Section III(A)(1) and (2) shall be effective as of the date of the Commission order approving this Agreement.

4. The results of the revenue increases by customer class are set forth in Exhibit 2 to this Agreement. The monthly bill of an average residential customer using 8.58 hundred cubic feet (ccf) of water per month will increase from $50.12 (inclusive of the WICA surcharge) to $54.00, or $3.88. This translates into an annual increase of $46.56.

5. The Settling Parties agree that PWW should file tariff pages implementing the terms contained in this Agreement by no later than 15 days from the date of the Commission order approving this Agreement.

C. Modifications to Ratemaking Structure.

1. Reasons for Modifications to PWW's Ratemaking Structure.

a. In the Acquisition Order, the Commission approved a unique ratemaking structure as set forth in the DW 11-026 Settlement Agreement which was to be applied with respect to the future rate cases of each of the three regulated utilities owned by Penn Corp. In a subsequent order, the Commission approved clarifications to this ratemaking structure (See Commission Order No. 25,693 (July 5, 2014) at 3 in DW 13-130). The instant Agreement refers to this ratemaking structure, including the Commission's subsequent approved clarifications, as the "Original Rate Structure".

b. The Commission's approval of the Original Rate Structure provides guidance to interested stakeholders – such as the City, its lenders, the utilities and their management, their regulators, current and potential lenders to the utilities, and credit rating agencies – concerning how the Penn Corp utilities shall file for rate relief in subsequent rate cases, as well as the parameters under which the Commission shall review and set rates for those utilities in the future. While the Commission always retains all jurisdiction and authority to set just and reasonable rates in accordance with the Federal and State Constitutions and applicable statutes, the Settling Parties agree and reaffirm that the Commission's provision of guidance regarding rate-setting with respect to the Penn Corp utilities, within the context where they are ultimately owned by the City, is in the public interest. Further, given the fact that the City does not seek a traditional equity-based rate of return, in that it has no equity investment in the Penn Corp utilities, necessitates that modifications be made to the traditional rate-setting method in order to ensure that those utilities will have rates at levels that are sufficient to enable each to meet their respective operating requirements, to satisfy their respective apportioned share of responsibility to pay the debt service arising from the City Acquisition Bonds, as well as to pay their respective debt service obligations arising from borrowings accomplished to finance their capital needs.

2. Specific Ratemaking Modifications.[6]

The Settling Parties agree and recommend that, in addition to approving the rates as set forth above, the Commission also approve, pursuant to RSA 378:7 and RSA 378:28, the specific modifications to the Original Rate Structure applicable to PWW as set forth in the following paragraphs of this Agreement and as reflected in the proposed rates.

a. 5-Year Average Test Period. PWW has proposed to substitute a five-year historical test period in place of the current single historical test year. The purpose for this proposal is to develop pro forma test year data regarding revenues and expenses which is less likely to reflect unusual or abnormal events, such as a uniquely dry or wet summer. The Settling Parties agree that PWW shall compute "test year" revenues using the trailing five-year average consumption at the most recently approved volumetric rates and fixed charges. The Settling Parties also agree that the five-year trailing average consumption determination shall be based on the four calendar years immediately preceding the designated test year for which the rate case is filed as well as the test year itself. Additionally, all direct test year expenses which are effected by differences in consumption, including but not limited to purchased water expense, electricity expense, and chemical treatment expense, shall also include pro forma adjustments to reflect the pro forma difference in consumption between the five-year average and the test year. PWW shall also include pertinent pro forma adjustments with respect to the financial data of each year that is included in the determination of the five-year average in

[6] Exhibit 4 more fully describes the ratemaking modifications proposed in this section.

accordance with current principles. Further, the Settling Parties agree that PWW's use of a five-year average test period in computing its revenue deficiency in no way precludes either the Staff or the OCA from making an alternative recommendation in place of such with respect to the determination of PWW's revenue deficiency.

b. Revenue Requirement Components. The Settling Parties agree that PWW's overall revenue requirement shall consist of the following three components:

1. **City Bond Fixed Revenue Requirement** (CBFRR) as described in the Original Rate Structure.

2. **Operating Expense Revenue Requirement** (OERR) which is further composed of the following:
   a. **Material Operating Expense Revenue Requirement** (MOERR).
   b. **Non-Material Operating Expense Revenue Requirement** (NOERR).

3. **Debt Service Revenue Requirement** (DSRR) which is further composed of the following:
   a. **Debt Service Revenue Requirement - 1.0** (DSRR-1.0)
   b. **Debt Service Revenue Requirement - 0.1** (DSRR-0.1)

b1. City Bond Fixed Revenue Requirement (CBFRR). The Settling Parties agree that the purpose of the CBFRR shall remain unchanged from that originally defined within the Original Rate Structure; that is, to include within PWW's overall revenue requirement a fixed rate level that is sufficient to enable PWW to contribute its apportioned share towards the repayment of the debt service arising from the City Acquisition Bonds. (See DW 11-026 Settlement Agreement at 8.) The Settling Parties further agree that PWW's CBFRR component should be increased from an annual amount of $7,465,139 as reflected in the test year to an annual amount of $7,729,032 as reflected in the proposed revenue requirement above. The reason for this increase is because under the Original Rate Structure, the revenue necessary to repay the City for the $5,000,000 portion of the Acquisition Bonds used to fund the RSF was derived as part of PWW's return on its rate base investment. However, the proposed Modified Rate Structure does not include a return on rate base component. Therefore, a ratable share (based on PWW's approved revenue requirement in its last full rate proceeding, DW 13-130) of the $5,000,000 RSF has been added to its previously apportioned share of the City Acquisition Bonds in order to derive the new annual CBFRR amount. The detailed calculation of the revised CBFRR is contained on Exhibit 5 to this Settlement Agreement.

b2. Operating Expense Revenue Requirement (OERR). The Settling Parties agree that PWW shall include in its overall revenue requirement an "Operating Expense Revenue Requirement" amount ("OERR"), which shall be equal to the sum of PWW's pro forma test year Operation and Maintenance Expenses, Property Tax Expense, Payroll Tax Expense, and Amortization Expense. The Settling Parties agree that the overall OERR revenue component shall be further segregated between a "Material Operating Expense Revenue Requirement" ("MOERR") component and a "Non-Material Operating Expense Revenue Requirement" ("NOERR") component. The Settling Parties agree that the MOERR shall include all expense items included in the OERR with the exception of those expense items which are specifically included in the NOERR (identified below). The Settling Parties agree that certain operating expenses should be designated as "Non-Material Operating Expense Revenue Requirement" (NOERR) items due to the potential susceptibility of such to be found to be completely or partially imprudently incurred within the context of a rate proceeding. However, the Settling Parties further agree that the categorization of an expense item in the NOERR does not preclude PWW's recovery of such in rates, as long as that expense item is found to be prudently incurred within the pro forma test year. Rather, those expenses which are designated as NOERR items shall not be included in any use of or replenishment from the "Material Operating Expense Revenue Requirement Rate Stabilization Fund" (MOERR RSF) described below. The Settling Parties agree that the following operating expenses are identified as NOERR expense items:

PWW Account	Description
921002-001-2109	Senior Management Vehicles
921003-001-2109	Senior Management – Fuel Purchased
921004-001-2109	Senior Management – Vehicle Registration
923000-001-2109	Outside Services
926001-001-2109	Officer's Life Insurance
926500-001-2109	Miscellaneous Employee Benefits
926501-001-2109	Miscellaneous Employee Benefits – Wellness
926502-001-2109	Miscellaneous Employee Benefits – Activities
926505-001-2109	Employee Relations
926600-001-2109	Tuition Reimbursements
926610-001-2109	Training Educational Seminars
930100-001-2109	Meetings & Conventions
930101-001-2109	Memberships
930200-001-2109	Public Relations
930300-001-2109	Meals
930410-001-2109	Charitable Contributions

b3. Debt Service Revenue Requirement (DSRR). The Settling Parties agree that PWW shall include in its overall revenue requirement a "Debt Service Revenue Requirement" amount ("DSRR"), the total of which shall generally be equal to 1.1 times the pro forma annual principal and interest payments on PWW's outstanding long-term debt as of the end of the pro forma test year. The Settling Parties agree that the proposed DSRR essentially replaces both return on rate base as well as depreciation expense which are traditionally key components of utility rate-making before this Commission. However, the Settling Parties are in agreement that, given PWW's current complete reliance on debt capital, as stated above, a rate structure based on debt service (i.e. total annual principal and interest) is critical to enabling PWW to access the lowest cost debt financing it can obtain, in order to provide safe and reliable service to its customers at the lowest possible rates. The Settling Parties agree that the DSRR shall be segregated into two revenue components. The first shall be equal to 100% of the pro forma debt service payments for the test year, and shall be referred to as "DSRR-1.0." The second component shall be equal to 10% of the pro forma debt service payments for the test year, and shall be referred to as the "DSRR-0.1". The establishment of the DSRR-1.0 relates to the use and replenishment of the DSRR-1.0 RSF which is explained below. The intended purposes for the establishment of the DSRR-0.1 are 1) to allow for the collection of revenues sufficient to satisfy the debt service coverage ratio requirements of PWW's bond financings and Penn Corp's covenant requirements for its line of credit, which is used by Penn Corp and its subsidiaries as a "back stop" for short-term capital needs; and 2) to allow PWW to collect revenues over-and-above its actual debt service in order to comply with cash flow coverage requirements which are typical for such financings as well as to meet obligations on new debt incurred between rate filings. The Settling Parties agree that any accumulated DSRR-0.1 revenues at the end of a given fiscal year will be utilized as the first funding source for capital expenditures incurred during the first months of the succeeding fiscal year, leading up to an annual bonding or financing event in support of capital expenditures for that succeeding year. The Settling Parties further agree that once approved by the Commission within the context of a rate proceeding, PWW's DSRR-1.0 and DSRR-0.1 amounts shall remain in effect until a subsequent rate proceeding, at which time new DSRR values shall be computed.

c. Allocation of the $5,000,000 RSF amongst the Penn Corp Utilities. The Settling Parties agree that the current $5,000,000 Rate Stabilization Fund (RSF) maintained by PWW, which was established under the Original Rate Structure, should be re-allocated amongst the three Penn Corp utilities such that PWW's allocated share of the RSF shall now be $3,920,000, with the remaining balance of $1,080,000 to be allocated between PEU and PAC. The allocation to PWW is based on the respective three utilities' last Commission approved revenue requirements as detailed on Exhibit 6 of this Settlement Agreement. The Settling Parties agree that the $1,080,000 portion of the RSF that is proposed to be allocated between PEU and PAC shall remain in PWW's RSF cash account until such time that rate case filings are made for PEU and PAC.[7] At that time, the modified rate structure for PWW that is proposed in this settlement agreement will also be requested as the proposed rate structures for both PEU and PAC. If the respective rate structures for PEU and PAC are approved by the Commission, the $1,080,000 will then be transferred from PWW's RSF funds to the respective RSF funds to be established in PEU and PAC.

d. Allocation of the $3,920,000 PWW RSF. In order to better ensure that customer rates remain stable, even under adverse conditions, as well as to enable PWW to meet all of its cash obligations under such conditions, the Settling Parties agree that PWW's apportioned share of the RSF in the amount of $3,920,000 should be allocated among three reserve funds as follows:

1. CBFRR RSF - $ 680,000
2. MOERR RSF - $2,850,000
3. DSRR-1.0 RSF - $ 390,000

d1. City Bond Fixed Revenue Requirement Rate Stabilization Fund (CBFRR RSF). The Settling Parties agree that the purpose of this reserve fund will remain unchanged from its original establishment under the Original Rate Structure; that is, to

[7] It is anticipated that PEU will make a rate filing later in 2017.

enable PWW to maintain stable water rates, even under adverse conditions, by providing a mechanism to ensure that PWW will meet its obligations relative to the City Acquisition Bond. (See DW 11-026 Settlement Agreement at 13ff.) However, the Settling Parties also agree that the amount of the CBFRR RSF should be reduced from $3,920,000 to $680,000 as calculated on Exhibit 6 of this Settlement Agreement. The difference of $3,240,000 will be used to initially fund the MOERR RSF ($2,850,000) as well as the DSRR-1.0 RSF ($390,000). The CBFRR RSF shall continue to be established and maintained at a level of $680,000 in accordance with the existing guidelines for the RSF approved in the DW 11-026 Acquisition Order.

d2. Material Operating Expense Revenue Requirement Rate Stabilization Fund (MOERR RSF). The Settling Parties agree that, similar to the CBFRR RSF established under the Original Rate Structure, this fund will be used to ensure stable rates by enabling PWW to meet its material operating expense obligations in the event of adverse revenue developments such as lower than expected consumption patterns due to wet weather and/or increases in material operating expenses above anticipated levels that occur between test years. The establishment of the MOERR RSF is intended to provide lenders to PWW with reasonable assurances that PWW will have the necessary cash available to pay its material operating expenses while, at the same time, having sufficient cash reserves to ensure payment of its debt service obligations on its issued long-term debt. The existence of cash reserves by PWW will accordingly facilitate PWW's ability to borrow funds at reasonable interest rates and on reasonable terms, which will directly benefit customers in the form of a reduced debt service requirement. The MOERR RSF will be established and maintained in accordance with the procedures set forth in Exhibit 4 to this Agreement. The Settling Parties agree that the MOERR

RSF should be initially established at an imprest level of $2,850,000 via a transfer of funds in such amount from the CBFRR RSF.

d3. Debt Service Revenue Requirement-1.0 Rate Stabilization Fund (DSRR-1.0 RSF). The Settling Parties agree that, similar to the CBFRR RSF established under the Original Rate Structure, this fund will be used to ensure that, even in adverse revenue conditions such as wet weather, there will be a sufficient cash reserve available to enable PWW to pay the debt service obligations on its long-term debt. The Settling Parties agree that the intended purpose for the establishment of the DSRR-1.0 RSF is to provide PWW's lenders with reasonable assurances that PWW will have sufficient cash available to pay its debt service obligations. This will better facilitate PWW's ability to borrow funds at reasonable interest rates and on reasonable terms, which will directly benefit customers in the form of a lower debt service requirement. The DSRR-1.0 RSF will be established and maintained in accordance with the procedures set forth in Exhibit 4 to this Agreement. The Settling Parties agree that the DSRR-1.0 RSF should be initially established at an imprest level of $390,000 via a transfer of funds in such amount from the CBFRR RSF.

e. Establishment of a Qualified Capital Project Annual Adjustment Charge (QCPAC). In Order No. 25,230 (June 9, 2011) in docket DW 10-091, the Commission approved a pilot Water Infrastructure and Conservation Adjustment ("WICA") mechanism. The Commission extended the pilot program in Order No. 25,693 in DW 13-130. The Settling Parties agree that the concept of an on-going annual surcharge between rate cases, based on essentially all of the capital projects undertaken and completed by PWW each year, is appropriate and helps to maintain adequate cash flows. Such adjustment surcharge is to be implemented pursuant to a capital budget that has been previously reviewed and approved by the

Commission. Similar to the WICA, this approach offers an effective and balanced interim mechanism to allow PWW to collect revenues in order to service the debt obligations that will be incurred to finance the capital projects which have been placed in service and are used and useful between full rate case filings. Such a mechanism also serves to mitigate rate shock for customers. Specifically, the Settling Parties agree to replace the WICA program with an annual "Qualified Capital Project Adjustment Charge" ("QCPAC") in accordance with the following provisions:[8]

(i) QCPAC eligible projects must meet the following criteria: 1) the capital project proposed by PWW must be completed, in service, and used and useful within the previous fiscal year for which the QCPAC filing is made; 2) the capital project must have been financed by debt that has been approved by the Commission in accordance with RSA 369; and, 3) the capital project must specifically correspond with a capital budget which has been previously submitted by PWW and approved by the Commission.

(ii) PWW shall make a filing with the Commission detailing the eligible projects and the amounts expended to acquire and/or construct such assets by no later than March 15 immediately following the fiscal year subject to the QCPAC. This filing will be the basis for the surcharge being requested in the current year relative to those eligible capital projects which meet the criteria stated in subparagraph (i).

[8] QCPAC Process Flow Diagrams that illustrate how the QCPAC mechanism will be applied are attached as Exhibit 7.

(iii) PWW shall also file a capital budget for all capital project expenditures for the current fiscal year in which a QCPAC filing is made for the purpose of receiving preliminary approval of such from the Commission. PWW shall also submit a forecast of capital project expenditures for the following two fiscal years for informational purposes only. These submissions will be made as part of each QCPAC filing described in subparagraph (ii).

(iv) Commission review of the respective filings will be initiated upon the filings described in subparagraphs (ii) and (iii), with a ruling upon such requests anticipated in approximately September of each year.[9] Such review shall also consist of an audit, as well as an accompanying report thereon, by the NHPUC Audit Staff.

(v) The Settling Parties agree that, due to the nature of the QCPAC program whereby filings will occur on an annual basis, PWW's submissions to the Commission should accurately reflect actual project costs and be substantially free of material errors. If, after review of PWW's filings, including an examination by the NHPUC Audit Staff of the underlying documentation in support thereof, either the Staff or the OCA deems those filings to be materially deficient in any respect, either may make a recommendation to the Commission to immediately reject the filings.

[9] Because PWW's first interest payment on bonded debt is due six months after issuance (anticipated for September 1 each year), if the Commission has not ruled on the QCPAC step increase request, PWW will fund such interest payments from the DSRR-1.0 RSF or the working capital line of credit until such time as the QCPAC is approved by the Commission.

(vi) Upon approval of a QCPAC by the Commission, the QCPAC shall become eligible for annual recoupment for bills rendered after the date for which bonded debt or other financing that is incurred with respect to the specific eligible projects is issued or consummated. It is anticipated that this date will be approximately March 1 of each year.

(vii) The QCPAC surcharge shall consist of: (1) the annual principal and interest payments with respect to the applicable capital project debt, multiplied by 1.1; and (2) incremental property taxes associated with the specific capital projects, as determined in the year of the granting of the QCPAC for such projects.

(viii) Notice to customers shall be made each year in conjunction with the annual filing described in subparagraph (ii) above, within 30 days of the date of such filing.

(ix) Customer bills will include the annual QCPAC upon the issuance of an order approving such surcharge, in the month following the effective date of the order.

(x) After PWW's submission of the current year annual capital budget, PWW shall also file quarterly updates with the Commission for the purpose of keeping the Commission apprised of its progress with regard to its proposed current year capital projects. PWW shall file these quarterly updates with the Commission on July 15, October 15, and January 15.

f. Withdrawal of PWW's Pending WICA Filing and Replacement by an Interim QCPAC Filing. The Settling Parties agree that the QCPAC mechanism should replace the WICA pilot program. On January 31, 2017, in accordance with the WICA pilot program, PWW submitted a filing in request of approval of an increase in its WICA surcharge based on the completion of certain WICA eligible projects during 2016.

PWW's filing also requested Commission approval of PWW's proposed 2017 WICA eligible projects as well as preliminary approval of its anticipated 2018 WICA eligible projects. PWW's submission was assigned Docket No. DW 17-017. Staff propounded discovery on PWW's submission to which responses have been received. Additionally, as stated above, the NHPUC Audit Staff has performed an examination of the underlying costs related to PWW's 2016 WICA eligible projects and has submitted a report on its findings. (See Exhibit 3) The Settling Parties agree that the 2016 capital projects upon which the proposed step adjustment in this Settlement Agreement is based are inclusive of the 2016 WICA eligible projects upon which the proposed increase in the WICA surcharge in DW 17-017 is based. Therefore, the Settling Parties agree that upon approval of this Settlement Agreement by the Commission, PWW shall withdraw its WICA filing in DW 17-017 and that docket be closed. In place of that WICA filing, the Settling Parties agree that PWW shall file an interim QCPAC submission with the Commission within 15 days of the Commission's order approving this Settlement Agreement. The interim QCPAC submission shall include the anticipated 2017 QCPAC budget and a forecast of capital project expenditures for fiscal years 2018 and 2019. PWW's proposed capital budget for 2017 shall specifically correspond with PWW's anticipated filing for financing approval of its 2017 capital projects.

3. Administrative and Rate Case Requirements.

a. As noted above, the Settling Parties agree and recommend that the Commission approve the modifications to the Current Ratemaking Structure described above. The details of the computations and impacts of these proposed modifications are reflected in Attachment JPL-1 to this Settlement Agreement. The Settling Parties further agree and recommend that the Commission require PWW to file its next rate case in accordance with the procedures and methodologies described in this Settlement Agreement and consistent with the computations set forth in in the exhibits and attachments to this Settlement Agreement.

b. An important objective of the proposed modified rate structure is to increase PWW's access to credit markets at enhanced credit ratings, giving PWW access to lower cost debt, to the benefit of its customers. The Settling Parties agree and recommend that the Commission require PWW to provide written notice to the Commission, the Staff and the OCA of any changes in its credit rating status with any applicable credit rating agency, including a copy of the credit rating agency's notice of such change, if a written notice is in fact provided by the agency as of the time of the change, within 30 days after PWW receives notice of such a change.

c. The Settling Parties agree and recommend that the Commission require PWW to provide monthly reports to the Commission, the Staff and the OCA regarding the status of the CBFRR RSF, the DSRR-1.0 RSF, and the MOERR RSF at the times PWW files its monthly statement of operations with the Commission.

d. The Settling Parties agree PWW should be required to file a full rate case in certain situations when the total amount of funds held in the CBFRR RSF, the DSRR-1.0 RSF, and the MOERR RSF as maintained for the benefit of PWW (the "Combined PWW Rate Stabilization Funds") grow to be materially greater than the target of such funds most recently established by the Commission. As such, the Settling Parties agree and recommend that the Commission require PWW to file a full rate case at any time that the average of the amounts of cash held in the Combined PWW Rate Stabilization Funds as of the last day of each month for the 13-month period ending on December 31 of each year is greater than 150% of the combined target amount for such funds as most recently established by the Commission. When the monthly reports filed by PWW indicate that this excess amount has occurred, then PWW shall file a full rate case within 6 months following the filing of such monthly report. In the next rate case, the Company understands that the parties may issue data requests seeking a comparison of the revenue requirements under the instant settlement agreement, and those that would have been required under the rate-making structure established in Docket No. DW 11-026. If a party makes such a request, the Company agrees to furnish such data to the best of its ability.

D. Rate Case Expense Surcharge.

The Settling Parties agree and recommend to the Commission that PWW should be allowed to recover its reasonable rate case expenses for this proceeding through a surcharge. PWW's rate case expenses may include, but are not limited to, its legal and consultant expenses, as well as its incremental administrative expenses such as copying and delivery charges. PWW agrees to file its final rate case expense request, pursuant to Puc 1905.02, no later than 30 days from the date of the Commission's order approving this Settlement Agreement. The Staff and the OCA will have an opportunity to review rate case expenses and provide recommendations to the Commission for approval.

E. PWW Request for Distribution for City Eminent Domain Expenses.

The Settling Parties agree and recommend to the Commission that PWW's request to enhance the CBFRR component of the current ratemaking schedule to include an amount for repayment of the City of Nashua's eminent domain expenses should be denied. The Settling Parties agree and recommend that the Commission should clarify and require that neither PWW, PEU or PAC may collect revenues from customers for the purpose of distributing cash to Penn Corp or ultimately as a special dividend or other form of distribution to the City to reimburse eminent domain costs or for any other purpose whatsoever. The Settling Parties further agree and recommend that the dividend restrictions contained in the DW 11-026 Settlement Agreement remain in full force and effect.

IV. Conditions

1. The Settling Parties expressly condition their support of this Agreement upon the Commission's acceptance of all its provisions, without change or condition. If the Commission does not accept the provisions in their entirety, without change or condition, any party hereto, at its sole option exercised within 15 days of such Commission order, may withdraw from this Agreement, in which event it shall be deemed to be null and void and without effect and shall not be relied upon by any Settling Party to this proceeding or by the Commission for any purpose.

2. The Commission's acceptance of this Agreement does not constitute continuing approval of, or precedent regarding, any particular principle or issue in this proceeding, but such acceptance does constitute a determination that the adjustments and provisions set forth herein in their totality are just and reasonable and consistent with the public interest. In its order addressing the approvals recommended in this Agreement, the Commission should expressly find that the approvals recommended herein are unique to this case and should not be viewed as having precedential impact with respect to any particular principle or issue in this proceeding for any other case or situation for reasons.

3. The discussions that produced this Agreement have been conducted on the explicit understanding that all offers of settlement relating thereto are and shall be confidential, shall be without prejudice to the position of any party or participant representing any such offer or participating in any such discussion, and are not to be used in connection with any future proceeding or otherwise.

4. This Agreement may be executed in counterparts.

IN WITNESS WHEREOF, the Settling Parties have caused this Agreement to be duly executed in their respective names by their fully authorized agents.

PENNICHUCK WATER WORKS, INC.
By its attorneys
Rath, Young and Pignatelli, P.C.

Dated: 7-19-17

By: ______________________
Richard W. Head

STAFF OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Dated: 7/19/17

By: ______________________
John Clifford
Staff Attorney

OFFICE OF CONSUMER ADVOCATE

Dated: 7/19/2017

By: ______________________
D. Maurice Kreis
Consumer Advocate

LDG Exibit 2

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Pennichuck Water Works, Inc.

Docket No. DW 19-084
Request for Change in Rates

&

Docket No. DW 20-055
Petition for Financing Approval

SETTLEMENT AGREEMENT

June 2020

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STATE OF NEW HAMPSHIRE

BEFORE THE

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&

Docket No. DW 20-055
Petition for Financing Approval

SETTLEMENT AGREEMENT

SUMMARY: This Settlement Agreement (Agreement) is entered into by and among Pennichuck Water Works, Inc. (PWW or Company), Staff of the New Hampshire Public Utilities Commission (Staff), the Office of the Consumer Advocate (OCA), and the City of Nashua (City) (together, Settling Parties), with the intent of establishing a modified ratemaking mechanism as requested by PWW's rate case filing (Docket No. DW 19-084) and supporting PWW's request for up to $75 million in financing (Docket No. DW 20-055), as discussed below.

As part of its original rate filing, the Company proposed, among other modifications to its ratemaking structure, the addition of an annual Material Operating Expense Surcharge (MOES). The purpose of the MOES was twofold: (1) to ensure that the Company had sufficient earnings between general rate proceedings to cover its operating expenses; and (2) to stem the drastic deterioration of its Material Operating Expense Revenue Requirement – Rate Stabilization Fund (MOERR-RSF)[1] as has been experienced by the Company since its last rate proceeding.

PWW proposed an annual MOES filing that would have reconciled its most recent total annual operating expenses with the operating expenses reflected in its current rates. The resulting difference would have resulted in either a surcharge or credit in customer bills, similar to the previously approved Qualified Capital Project Adjustment Charge (QCPAC).

During the course of the rate investigation, however, the other parties expressed hesitancy to support the Company's MOES request. Staff noted the possibility that the concept is prohibited as single-issue ratemaking, and that, in conjunction with the QCPAC process, constituted an annual rate proceeding, which contrasts with RSA 378:7 ("the commission shall be under no obligation to investigate any rate matter which it has investigated within a period of 2 years, but may do so within said period at its discretion"). The parties also expressed several other concerns: undue burden on ratepayers in the years they experience a surcharge, especially when combined with other possible surcharges; ratepayer confusion regarding price signals and associated consumption patterns, especially in years resulting in a customer credit; and the difficult logistics of administering an annual reconciliation of PWW's operating expenses. As a result, the Company abandoned the MOES concept.

In order to address PWW's continued cash flow and liquidity concerns, and successfully resolve the current rate proceeding, the Settling Parties have, instead, agreed upon an alternative two-pronged approach. First, seek approval of the Company's financing petition in DW 20-055 which, if approved, (1) will sufficiently replenish, on a one-time basis, PWW's depleted

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[1] The MOERR-RSF is a reserve fund currently established at an imprest level of $2,850,000 that provides cash coverage for PWW's material operating expenses between rate cases, enabling the Company to meet its obligations which allows for stable water rates. *Pennichuck Water Works, Inc.*, Order No. 26,070 (November 7, 2017) at 7-8.

MOERR-RSF, and (2) may result in the realization of a decrease in the Company's annual debt service obligations that will immediately reduce PWW's revenue requirement to be approved in Docket No. DW 19-084. Second, the Settling Parties have proposed a modification to PWW's current ratemaking structure to include an imbedded Material Operating Expense Factor (MOEF) within the existing Operating Expense Revenue Requirement (OERR)[2] component of the Company's overall revenue requirement.

The Settling Parties wish to make it clear that a Commission Order approving the Agreement, which includes modifications to PWW's revenue requirement calculation and other ratemaking adjustments proposed in Docket No. DW 19-084, <u>would not result in an immediate rate increase</u>. The Settling Parties, instead, request that, contingent upon 1) the approval of the requested financing in Docket No. DW 20-055, and 2) the ratemaking modifications proposed in Docket No. DW 19-084, the Commission issue a subsequent Order, after the approved financing is closed, which would set the final revenue requirement and resulting rates charged to customers.

The Settling Parties agree that the Commission's approval of PWW's proposed financing in Docket No. DW 20-055, and its subsequent approval of a proposed revenue requirement, as modified, coupled with other proposed measures designed to improve the Company's cash flow and liquidity in Docket No. DW 19-084, resolve all current issues in both dockets, and once the approvals are fully implemented, would result in just and reasonable rates.

[2] OERR includes both the MOERR and the NOERR components indicated in the flowchart schedules, Appendix 2, Attachment A.

I. PROCEDURAL HISTORY

A. <u>Docket No. DW 19-084 (PWW) Request for Change in Rates</u>

The Commission instituted Docket No. DW 19-084 on April 26, 2019 in response to PWW's motion requesting waiver of certain rate case filing requirements, per N.H. Admin. R., Puc 1604.01, in anticipation of its forthcoming rate case submission. On April 30, 2019 the OCA filed its letter of participation. On May 14, 2019, PWW filed a notice of intent to file rate schedules.

On July 1, 2019, PWW filed rate schedules and tariffs reflecting an effective date of August 1, 2019. The Company proposed an increase to its revenue requirement of $3,778,139, or 11.91%, resulting in allowed revenues from base rates of $35,510,803. In addition, PWW filed a petition requesting that the Commission approve further modifications to its revenue requirement methodology approved in its last rate proceeding, DW 16-806.

In support of its requests, the Company provided the pre-filed testimonies of Larry D. Goodhue, Chief Executive Officer of PWW, Donald L. Ware, Chief Operating Officer of PWW, and Gregg H. Therrien, Assistant Vice President of Concentric Energy Advisors, Inc., PWW's Cost of Service consultants. The Company also filed a Motion for Protective Order and Confidential Treatment of certain compensation and payroll information included in its rate filing. On July 16, 2019, PWW supplemented its rate filing with attachments to the pre-filed testimony of Gregg H. Therrien. On July 25, 2019, the City filed a petition to intervene. On August 21, 2019, PWW filed the supplemental testimony of Larry D. Goodhue on the subject of the bond rating process and the effect of PWW's bond rating on its ratemaking requests.

On July 31, 2019, the Commission issued Order No. 26,279 suspending the taking effect of PWW's tariffs for twelve months and scheduling a Prehearing Conference and technical session for October 3, 2019. On August 21, 2019, PWW filed affidavits confirming that the suspension order had been published in area newspapers.

At the Prehearing Conference, the Commission granted the City's intervention request. During the technical session that followed, Staff and the parties developed a proposed procedural schedule to govern the course of the proceeding. The proposed procedural schedule was filed with the Commission by Staff on October 10, 2019, and the Commission approved it on October 16, 2019. Pursuant to that schedule, the Settling Parties conducted numerous rounds of discovery and held a number of technical sessions and settlement conferences.

On March 16, 2020, PWW filed a partially assented to motion for temporary rates, per RSA 378:27. In its petition, PWW requested that its current rates be set as temporary rates with an effective date coinciding with the date of its temporary rate filing. PWW sought to recoup the difference in its current rates and the final rates determined by the Commission back to March 16, 2020, per RSA 378:29.

On April 14, 2020, the Commission issued Order No. 26,348 suspending the taking effect of PWW's temporary rate tariffs, not to exceed the suspension period set by the permanent rate tariff suspension in Order No. 26,279. The Commission also scheduled a web-based hearing on temporary rates for May 13, 2020. The Commission further ordered that PWW send notice to all of its customers of the proposed temporary rates by no later than April 15, 2020 and to publish a copy of the Commission's order on the Company's website by no later than April 14, 2020. On April 16, 2020, PWW submitted an affidavit of its compliance with all notification requirements of Order No. 26,348.

On April 29, 2020, Staff, on behalf of the other parties in the proceeding, filed a letter requesting the Commission suspend the previously approved procedural schedule and approve a technical session on May 6, 2020, where the parties would discuss a revised procedural schedule. Staff's letter further requested that the previously approved hearing dates of May 13, June 30, and July 1, 2020 be held open. On May 1, 2020, the Commission approved that request by Secretarial Letter.

On May 11, 2020, PWW filed a settlement agreement on temporary rates entered into by the Company, Staff, the City, and the OCA. In that settlement agreement, all of the settling parties agreed that PWW should be granted temporary rates at its current rate level for the pendency of the rate proceeding. Staff, PWW, and the City agreed that the effective date for temporary rates to take effect should be for service rendered on and after March 16, 2020, the filing date of the Company's temporary rate petition. The OCA, however, took the position that the effective date for temporary rates should be April 16, 2020 the date on which PWW's customers received notification of the temporary rate filing. The settling parties further agreed that the effective date for temporary rates was to be the only issue litigated at the temporary rate hearing.

During the May 13, 2020 hearing, the settlement agreement on temporary rates was presented for approval and the Commission heard arguments from the Company, the OCA, and Staff as to its effective date. On that same day, Staff filed a proposed amended procedural schedule, requesting two additional technical sessions and a hold on the hearing dates reserved for June 30 and July 1, 2020. The Commission approved the amended schedule on May 15, 2020. On June 2, 2020, Staff filed a final procedural schedule to govern the remaining course of the proceeding that was approved by the Commission on June 11, 2020.

B. <u>Docket No. DW 20-055 (PWW) Petition for $75 Million in Financing</u>

On April 23, 2020, PWW filed a petition requesting approval and authority, under RSA 369:1-4, to issue up to $75 million in an aggregate principal amount of tax-exempt or taxable bonds. As a result, the Commission instituted Docket No. DW 20-055.

On April 28, 2020, the OCA filed its letter of participation. On May 19, 2020, PWW filed an amended financing petition for the purpose of correcting two minor errors contained in its original petition. On June 1, 2020, the Commission issued an Order of Notice scheduling a web-based hearing regarding PWW's financing request on June 30, 2020. PWW was further ordered to publish a copy of the order of notice on its website by June 2, 2020.

II. HISTORY OF PWW'S RATEMAKING STRUCTURE, PRIOR COMMISSION DETERMINATIONS, AND CURRENT CONSIDERATIONS

Since approval by the Commission of the City's acquisition of PWW's parent company, Pennichuck Corporation, the Company's financial structure and, thereby, its ratemaking structure has undergone a unique process of change, as characterized in the numerous Commission-approved financings and general rate increases since that acquisition. The following section highlights those changes in PWW's financial and ratemaking structures as well as the continuing challenges the Company has encountered since its last rate proceeding. Further, the Settling Parties have provided flowcharts depicting PWW's previously approved ratemaking structure along with the further modifications proposed in this Agreement in Appendix 2, Attachment A to this document.

A. <u>Docket Nos. DW 11-026 and DW 13-130</u>

In Order No. 25,292 (November 23, 2011), in Docket No. DW 11-026, the Commission approved the acquisition of PWW's parent company, Pennichuck Corporation, by the City. That acquisition was completed on January 25, 2012, whereby Pennichuck Corporation ceased to be a publicly traded company. The City became its sole shareholder with a "limitation on Nashua's ability to draw dividends or other distributions from Pennichuck Corporation" (at page 45). With that limitation in place, there is no ability to sell stock. The consequences of such are that Pennichuck Corporation and its affiliates no longer have access to the equity markets for financing and are required to utilize debt, only.

As part of the acquisition, the Commission approved a modified ratemaking structure for PWW and its two affiliates, Pennichuck East Utility, Inc. (PEU) and Pittsfield Aqueduct Company, Inc. (PAC). That modification enabled those regulated utilities to earn a reasonable return on invested assets through a ratemaking methodology that still produced just and reasonable customer rates, as required under *FPC v. Hope Natural Gas*, 320 U.S. 591, 602-603 (1944). The rate structure approved also included a $5 million Rate Stabilization Fund (RSF) designed to provide assurance to creditors that PWW and its affiliates would meet the repayment requirements relative to the City's acquisition bond. *See Joint Petition of Nashua, Pennichuck Corporation, et al*, Order No. 25,292 at 30 (November 23, 2011) ("the fund is intended to provide holders of the City Acquisition Bonds with reasonable assurances of the available cash to be used to pay debt service on the City Acquisition Bonds, similar to a debt service reserve fund, and will hence facilitate Nashua's ability to borrow funds at reasonable interest rates, which will directly benefit customers in the form of a lower cost of capital").

The rate structure initially approved by the Commission was further clarified in PWW's first, post-acquisition, general rate proceeding, Docket No. DW 13-130, in Order No. 25,693 (July 15, 2014).

B. Docket Nos. DW 14-130 and DW 15-196

The modified ratemaking structure departed from the traditional rate-setting formula applicable to typical investor-owned utilities, which, unlike PWW, have access to equity markets for their financing needs. By contrast, post-acquisition, PWW and its affiliates were required to utilize only debt in order to meet their financing needs.

As such, it became necessary for PWW to restructure the nature of its debt financing. Pre-acquisition, the repayment terms, loan covenants, and coverage requirements associated with much of PWW's debt was characteristic of a traditional investor-owned utility, including interest only payments and balloon maturities. Post-acquisition, however, PWW's capital structure was more akin to that of a municipality, consisting of all debt. Thus, PWW restructured the repayment terms for much its existing debt to that of fully amortizing loans. PWW also renegotiated its loan covenants and coverage requirements based on terms consistent with its new debt-only capital structure. This restructuring of PWW's debt occurred though a series of Commission financing orders commencing with Order No. 25,734 (November 7, 2014) in Docket No. DW 14-130 (approval of PWW's Integrated Capital Finance Plan totaling $54.5 million), and Order No. 25,808 (September 2, 2015) in Docket No. DW 15-196 (approval of $25.5 million in tax-exempt bonds issued through the New Hampshire Business Finance Authority (NHBFA)).

C. Docket No. DW 16-806

To satisfy the renegotiated bank/lender coverage requirements associated with its refinanced debt and to continually attract necessary new debt under favorable loan terms for its on-going capital needs, PWW became increasingly reliant and focused on the cash flow generated from its customer rates as the key to its long-term viability. As a consequence, in

PWW's last rate proceeding, Docket No. DW 16-806, the Commission approved further modifications to PWW's already unique ratemaking structure in Order No. 26,070 (November 7, 2017).

Consequently, PWW's ratemaking structure became one exclusively intended to meet its overall cash flow needs in order to give its creditors assurance that it was both solvent and sufficiently liquid. Specifically, the Company's ratemaking structure was designed to recover the aggregate of PWW's: (1) promissory note to the City relative to its portion of the repayment on the acquisition debt (City Bond Fixed Revenue Requirement (CBFRR)), (2) utility operating expenses (Operating Expense Revenue Requirement (OERR)), and (3) debt service (Debt Service Revenue Requirement (DSRR)). See Appendix 2, Attachment A.

Further, the Commission approved the Company's annual QCPAC. Under this mechanism, the Company submits an annual QCPAC filing for approval to recover the additional revenues necessary to pay the debt service and property taxes associated with its prior year's capital expenditures. As such, the QCPAC enables the Company to sustain the cash flows necessary between general rate proceedings in order to maintain its capital expenditure program.

The Commission also approved a re-allocation of the $5 million RSF that was originally established in Docket No. DW 11-026. Initially, $1.08 million of the original RSF was allocated to PEU and PAC ($980,000 of which was subsequently allocated to PEU in its next completed rate case in Docket No. DW 17-128) to assist those utilities in meeting their cash needs.

The remaining $3.92 million of the original RSF retained by PWW, was then apportioned amongst three reserve funds to provide additional coverage for the specific cash flow needs of the Company as established in its modified revenue requirement, as follows: (1) CBFRR-RSF (PWW's obligation relative to the City's acquisition bond) – $680,000; (2) MOERR-RSF

(PWW's material operating expenses) – $2,850,000; and (3) DSRR-1.0-RSF (PWW's debt service requirements) – $390,000. The re-apportionment of PWW's RSF funds was specifically designed to provide stability to customer rates even under adverse conditions, as it could draw on those funds to meet its cash obligations under such conditions.

Overall, however, the ratemaking modifications approved in Docket No. DW 16-806, were designed to provide: 1) stability to customer rates, 2) assurance to creditors of PWW's ability to effectively meet its cash obligations, 3) sufficient cash-flow coverage for PWW's operating needs, and 4) enhancement to PWW's credit rating. All of which were anticipated to increase the Company's ability to access the credit markets and obtain lower-cost debt financing.

D. Current Challenges

Despite the approved modifications in DW 16-806, and as illustrated in PWW's rate case schedules and further discussed in the pre-filed testimony of Donald L. Ware, PWW's operating expenses have increased at a rate greater than the rate of inflation for each of the past three years (Bates 68). As a result, PWW's expenses have fully depleted its MOERR-RSF. As of December 31, 2019, PWW's MOERR-RSF reflected a deficit of about $2.8 million, funded through borrowings from Pennichuck Corporation's working capital line-of-credit.

The depletion experienced by PWW in its MOERR-RSF since its DW 16-806 rate proceeding has exposed a deficiency in PWW's current ratemaking structure. That being, the current structure does not enable PWW to maintain sufficient cash coverage in order to meet the inevitable increases in its material operating expenses between rate cases.

Further, as described throughout the pre-filed and supplemental testimonies of Larry D. Goodhue in this proceeding, adequate cash coverage remains a concern of PWW's bond rating agency, Standard & Poors (S&P) and has adversely impacted the Company's credit rating. As a consequence of the recognized deficiency in PWW's current rate structure and the resulting deterioration of its cash reserves, in March 2019, S&P slightly lowered the Company's bond rating from "A+" with a "stable outlook" to "A+" with a "negative outlook". Subsequently, however, in April 2020, due to a continuation of the decline in PWW's cash reserves, S&P further downgraded PWW's bond rating from "A+" to "A" with, still, a "negative outlook".

As a result, there is presently a concern that, if the Company's credit rating continues to decline, this would seriously impair PWW's ability to 1) access the debt markets for needed capital financing, and 2) attract the lowest cost of borrowings possible. If such were to occur, PWW's water rates charged to customers would also be adversely impacted.

III. SETTLEMENT AGREEMENT - DOCKET NO. DW 20-055 DEBT RESTRUCTURING

The Settling Parties agree and recommend the Commission approve PWW's request for financing in an amount up to $75 million through the issuance of taxable bonds.[3] The Settling Parties agree that the four purposes of the proposed financing (see Section A), meet the requirements of RSA 369:1-4. The Settling Parties also agree that the proposed terms of the proposed financing (see Section B) are reasonable, in accordance with RSA 369:1-4. The Settling Parties further agree that the requested financing is in the public good (see Section C), pursuant to RSA 369:1-4, and, subject to the receipt of further documentation (see Section D), should be approved by the Commission (see Section E) as the end result provides the Company with further financial stability, allowing it to continue to provide safe and adequate drinking water to its customers at reasonable rates.

[3] The initial filing indicated that the financing would consist of the issuance of taxable and/or non-taxable bonds. At the time of settlement, however, PWW determined that the issuance of non-taxable bonds was not an option available to the Company. See the Company's response to Staff 1-2 in DW 20-055 and the Company's First Amended Petition, request (b) at page 7.

A. Four Purposes of the Requested Financing

1. Replenishment of MOERR-RSF

The need to fully replenish PWW's MOERR-RSF fund at this time is based on the Company's financial structure as a debt-only funded entity. Cash flow coverage is paramount in order for PWW to remain a financially viable entity. Further, the Company's ability to maintain adequate cash coverage ultimately benefits ratepayers by enabling PWW to (1) access the debt markets to obtain the financing it needs, and (2) attract the lowest cost of borrowings possible.

PWW's overall ability to maintain proper liquidity, in both its operating cash accounts and its RSF funds, and its ability to refill and maintain those funds, is the highest risk factor that the Company currently faces as exemplified by the recent small downward adjustment in its credit rating. Although the Company's actual credit rating going forward is difficult to predict mainly due to factors relative to the economy as a whole, the Settling Parties agree that the combined effect of replenishing the MOERR-RSF with proposed modifications to PWW's overall rate structure, subsequently described in this Agreement, should have a positive impact on the credit rating agency's view of PWW.

Therefore, PWW currently estimates that approximately $5.5 million of the total proceeds from the proposed financing will be required in order to achieve full replenishment of its MOERR-RSF to its authorized imprest level of $2,850,000 and to repay amounts borrowed on Pennichuck Corporation's working capital line-of-credit used to finance the deficit in that fund, as detailed in Appendix 2, Attachment B. This is intended to be a one-time replenishment of the MOERR-RSF in this manner, as the current deficit is viewed as the result of the previously described deficiency in the Company's ratemaking structure. With proposed modifications to PWW's rate structure, it is anticipated that future reconciliations of the MOERR-RSF will be achieved via either charge or credit adjustments to PWW's revenue requirements in subsequent rate proceedings, as further described in this Agreement.

The final amount of the bond financing designated to replenish the MOERR-RSF and repay the amounts borrowed on the Pennichuck Corporation line-of-credit will be determined at the actual time of the bond issuance. If the total line-of-credit to be repaid is less than estimated, as of the date of repayment and closing of this refinancing, then the resulting bond issuance will decrease by an equivalent amount.

2. <u>2014A, 2015A, and 2015B Bond Refinancings</u>

The largest portion of the overall financing request relates to the refinancing of a combined principal amount of $56,650,000 of PWW's currently outstanding Series 2014A tax-exempt bonds (remaining outstanding principal balance of $36,695,000), Series 2015A tax-exempt bonds (outstanding remaining principal balance of $18,330,000) and Series 2015B taxable bonds (outstanding remaining principal balance of $1,625,000). The refinancing is anticipated to allow the Company to reduce the cost of this existing debt with lower interest bonds as well as to extend the term to maturity of the debt, resulting in a direct benefit to existing customers.

Specifically, PWW anticipates that it would refinance these debt obligations with taxable bonds at more favorable interest rates currently estimated to be approximately 3.67% as opposed to the current interest rate on the debt of 4.271%. The repayment term of the new bonds of 35 years will effectively extend the amortization period of the refinanced debt to 41 and 40 years, respectively, for the 2014 and 2015, enabling that debt to be more closely aligned with the useful lives of their associated financed assets, thereby mitigating issues related to generational inequity. Combined, the anticipated lower interest rate and extended term on the bonds would lower the Company's annual Debt Service Revenue Requirement (DSRR) component of its overall revenue requirement. The precise redemption value of the bonds, however, will not be realized until the date of closing. PWW will not be issuing the bonds, if the annual debt service for the new bonds yields no savings on annual debt service as compared to current debt service for the refinanced debt obligations.

Based upon the current requirements relative to refinancing these obligations, the 2014A and 2015A/B bonds are subject to early refunding/redemption provisions if that occurs prior to their future "call dates" in 2024 and 2025. Pursuant to those requirements, the Company must provide an escrow deposit that is calculated as of the date of the pricing of the new bonds. That escrow deposit then is to be invested in US Treasury Instruments (State and Local Government Series debt securities). The currently estimated amount of the required escrow is $6,973,050. However, the estimated interest savings to be realized on the refinanced debt is anticipated to exceed the present value of the required escrow deposit by the third year of the serialized offering.[4]

Based on the above, the combined principal and escrow requirements related to the refinancing of the 2014A and 2015 A/B bonds is currently estimated to be $63,623,050 ($56,650,000 + $6,973,050). The exact dollar amount, however, will not be fully realized until the date of pricing for this transaction.

3. American United Life Insurance (AULI) Loan Refinancing

The proposed financing would also enable PWW to refinance a further outstanding loan relative to the $2.4 million remaining principal amount on PWW's note payable to AULI, which matures and is due in full on March 1, 2021. That loan was originally taken out in 1996, to fund

[4] See the pre-filed direct testimony of Larry D. Goodhue in DW 20-055, Bates 37.

capital projects at the time, in the amount of $8 million over 25 years, at an interest rate of 7.4% with annual sinking fund payments of $400,000. It is necessary for PWW to refinance the remaining $2.4 million due on this loan prior to its maturity because the Company's current revenue structure does not enable it to possess the necessary "cash on hand" to pay the entire amount due on that date. However, the AULI debt instrument also has a "make whole" provision if it is repaid prior to the March 1, 2021 due date. That requirement is currently estimated to be approximately $74,141 if the loan is paid on August 1, 2020, but will decrease subsequent to that date.[5] The precise amount of the "make whole" payoff will not be determined until the date of closing as its precise determination is based upon the number of days remaining until loan maturity as well as the US Treasuries rate upon which the "make whole" provision is calculated.

With the present inclusion of the refinancing of this loan within the proposed overall financing, it is anticipated that PWW's ratepayers will benefit from a further reduction in the Company's debt service in that the currently estimated interest rate of the proposed financing of 3.67% is less than half the interest rate of the existing loan of 7.40%. This is particularly beneficial, as refinancing the $2.4 million amount due on its own in early 2021 would not inure the same benefits as incorporating it into the overall proposed $75 million financing, as that amount on its own is too small to take to the bond markets, and would be at much higher interest rates with onerous covenants and requirements, if refinanced with a term loan at a commercial bank or the existing AULI lender.

[5] If the AULI loan is repaid on October 1, 2020, the required "make whole" provision amounts to approximately $53,000.

4. Debt Issuance Costs

The fourth and final element of the proposed financing is to fund the overall cost of issuance for the bonds, which is currently estimated to be approximately $1.3 million. Thus, the currently anticipated total value of the financing is approximately $72.9 million[6], inclusive of the estimated issuance costs. However, due to the unpredictable nature of the bond markets, PWW requests authority to issue up to $75 million in taxable bonds. This is to ensure that even in the event where the bonds are issued at a discount, the Company will 1) receive the actual cash it requires from this transaction for the purposes intended, and 2) be provided with the financial flexibility it needs in order to facilitate a bond closing under that scenario.

B. Bond Mechanism and Specific Terms

The financing will be accomplished by issuing either (1) serialized bond offerings (a series of bonds with different terms to maturity), (2) one or more term bonds with annual sinking fund payments, or (3) a combination thereof. However issued, the financing will consist of taxable bonds with a fixed interest rate applicable to each instrument. The term of the bonds, in the aggregate, will be 35 years.[7] Repayment of the bonds will be unsecured, as per the existing Bond Indenture and consistent with the Company's prior bond issuances since 2014.

Based upon market conditions existing as of the date of this Agreement, PWW has estimated that bonds, with terms and conditions similar with the Company's previously issued 2014-2020 bonds, would be issued at an estimated interest rate of between 3.50% and 4.50%

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[6] This amount consists of the current sum of 1) MOERR-RSF replenishment - $5,500,000, 2) 2014 A and 2015 A/B bond refinancing with escrow requirement - $63,623,050, 3) AULI Loan refinancing with "make whole" requirement - $2,474,141, and 4) Debt Issuance Costs - $1,292,809. The total amount equals $72,890,000.

[7] The issuance, comprised of serial bonds and/or term bonds, would be paid off in their entirety in 35 years. The bond portfolio will be constructed such that in aggregate it will have an overall 35-year term and a level or declining annual debt service requirement over the course of the 35 years.

percent per annum, with a goal of an overall average total interest cost of approximately 3.67%, subject to PWW's credit rating and overall market conditions at the time of issuance.

As part of the bonding process, PWW will be updating its credit rating with S&P. That review by S&P must be conducted contemporaneously with the issuance of the bonds and cannot be completed prior to that timeframe. This is an essential step in the process of issuing these financial instruments and is highly impactful upon the Company's ability to issue the bonds and secure a favorable cost of interest on the bonds.

As such, PWW may see a reduction in the estimated interest rate should it receive a credit rating enhancement based on: (1) the financing transaction's ability to sufficiently improve the Company's liquidity; and (2) the Company's perceived ability to maintain that liquidity through the establishment of a Material Operating Expense Factor ("MOEF") as well as other rate structure modifications proposed as part of the DW 19-084 rate case settlement, if approved by the Commission. Conversely, the impact of COVID-19, as well as impacts to the crude oil market and the possibility of a recession in the U.S. Economy, and other factors relative to the overall taxable bond market, may result in an increase in the bond interest rate.

Attached to this Agreement as Appendix 1, Attachment A is a proforma financial net debt service cash flow projection calculated for each year of the total 35-year term of the proposed financing, or through the year 2055. The importance of this attachment is in the fact that it includes the net estimated debt service impact from this transaction, as compared to the existing debt service on the debt instruments to be refinanced, as well as the issuance of the $5.5 million of "new money" for the replenishment of the MOERR-RSF fund.

Among other assumptions, Page 1 of this model assumes that the bonds will be issued at an overall total interest cost of 3.67% resulting in year one net debt service (principal and interest) savings of $970,374. Page 2 differs in that it assumes the bonds will be issued at an overall total interest cost of 4.67% resulting in year one debt service net savings of $490,585.[8] Both scenarios further provide the calculated net debt service savings to be realized for each year leading up to the original maturity dates of the refinanced 2014A and 2015 A/B bonds culminating in 2036. It should be noted that while the calculations under each scenario extend beyond the original terms of the 2014A and 2015 A/B bonds, the indicated results during those years do not necessarily translate into an adverse change in rates to customers beginning in 2037.[9]

Because the Company's Debt Service Revenue Requirement (DSRR) component of its rate structure is tied to cash coverage for the principal and interest payments on PWW's debt obligations, and as such, maintaining or reducing the annual cash needs for those payments going forward is beneficial to the Company and, ultimately, its customers. In essence, this financing, as a subset of PWW's full DSRR portion of allowed revenues in future years, represents a more equitable distribution of debt over the useful life of capital assets and a stabilization of the DSRR portion of the Company's overall revenue requirement.

As the issuance of bonds is a true "market based" and negotiated activity, based upon supply versus demand for the bonds as of the date of issuance, the actual financing structure, i.e., rates, terms and conditions, amount, redemption provisions and coupon rate of the bonds, will be ultimately determined at the time of issuance based upon the prevailing market conditions and

[8] The calculated year one debt service savings under both scenarios have been incorporated into the calculations of PWW's estimated and maximum revenue requirements, respectively, illustrated in Appendix 2, Attachment C and discussed later in this Agreement with regard to the proposed settlement in DW 19-084.
[9] The calculated negative amounts for the years 2037 through 2055, appearing under the respective scenarios in Appendix 1, Attachment A, are merely the result of the fact that there are no anticipated debt service payments related to the existing 2014A and 2015 A/B bonds subsequent to 2036.

PWW's credit rating at the time of bond issuance. The terms of this Agreement, if approved by the Commission, place conditions and parameters around the proposed bond offering.

The bonds would be issued and sold by the New Hampshire Business Finance Authority (NHBFA), subject to approval by the NHBFA, and the Governor and the Executive Council (G&C). It is further anticipated that the bonds will be issued by the NHBFA as one or more series under the 2014 Loan and Trust Agreement that was agreed to and entered into by the NHBFA, PWW, and the Trustee, and under which the Company has previously issued bond offerings. PWW intends to issue this new debt with the covenants set forth in that agreement, which were implemented to be best aligned with the Company's current capital structure as well as its current and existing modified rate structure approved by the Commission in DW 16-806.

All payments of principal and interest on these bonds would be limited obligations of the NHBFA and would be payable solely from payments made by PWW. These bonds would not be general obligations of the State of New Hampshire, and neither the general credit nor the taxing power of the State of New Hampshire or any subdivision thereof, including the NHBFA, would secure the payment of any obligation under the bonds.

C. Public Good

The Settling Parties agree and recommend the Commission find that the proposed bond financing is in the public good for the following reasons:

1. Corresponds with PWW's Modified Rate Structure

The proposed financing will be issued with repayment terms and financial covenants that are aligned with the capital requirements of PWW as it is characterized under ownership by the City, and further supported by the ratemaking structure approved in DW 16-806 as well as the proposed modifications to that structure in PWW's instant rate proceeding, DW 19-084;

2. Reduction in PWW's Debt Service

The proposed financing is anticipated to refinance certain existing long-term debt at more favorable interest rates and at maturities that are better aligned with the useful lives of the originally funded capital assets. This is anticipated to benefit the Company's ratepayers both immediately and in the long-term;

3. Improvement in PWW's Capitalization

The proposed financing will generally improve the overall capitalization of PWW reflected in approved future revenue requirements, and more specifically DSRR components, which would be positively impacted during the years through the full maturity of the refinanced and re-termed bonds, based on reasonable projections;

4. Savings to PWW's Customers

The proposed financing will result in savings to PWW's customers by reducing the principal and interest payments on the financial instruments that are being refinanced, as well as through the estimated impact on the cost of money for future debt issuances, and further provides a more equitable distribution of debt over the life of capital assets; and

5. Improvement in PWW's Liquidity and Cash Flow

The proposed financing would fully replenish the Company's RSF funds on a "one-time" basis. Those funds are used to backstop PWW's allowed revenue structure, operating expenses, and overall liquidity position both immediately and in the long-term. This ultimately benefits PWW's customers, as it enables the Company to adequately fund its capital projects and operations at favorable interest rates, will provide PWW with full access to the debt markets.

6. Projected Impact on PWW's Average Residential Customers

The proposed financing is currently projected to result in a savings of $1.73 per month, or $20.76 annually, in the billings of PWW's current average residential customers. This is based on an estimated total interest cost of 3.67% and pertains to residential customers using 7.77 ccf of water per month. This projection is conditional, however, on the actual terms and conditions obtained by PWW for the bond financing when it concludes this transaction later this year.

D. Status of Required Approvals and Consents

In order to consummate the transactions contemplated by the proposed financings, the following approvals and consents are required:

(1) The requested approvals and findings of this Commission as required by RSA Chapter 369;

(2) Approval by the NHBFA and the G&C to issue taxable bonds through the NHBFA;

(3) Authorization of PWW's Board of Directors;

(4) Authorization by Pennichuck Corporation's Board of Directors; and

(5) Approval by the City of Nashua, in its capacity as Pennichuck Corporation's sole shareholder.

The respective Boards of Directors of PWW and Pennichuck Corporation have previously provided preliminary approval for the proposed financing and have authorized PWW's management to pursue all steps necessary to complete that transaction. Copies of those approval actions are attached to this Agreement under Appendix 1 as Attachments B and C. PWW's Board of Directors will also approve the final structure and terms of the proposed financing and the Bond Purchase Agreement, pursuant to which the proposed bonds will be issued.

PWW filed a request for approval with the City of Nashua. It is anticipated that the City's approval will be granted on June 23, 2020. As such, the Settling Parties agree that PWW will file documentation with the Commission of the City of Nashua's approval of the financing prior to the issuance of the Commission's order approving the proposed financing.

PWW submitted an application to obtain preliminary approval by the NHBFA Board of Directors to issue taxable and/or tax-exempt bonds on behalf of PWW. The NHBFA approved PWW's application on May 18, 2020. A copy of that approval is attached to this Agreement under Appendix 1 as Attachment D. The NHBFA has not actually reserved any portion of its bonding limit at this time, as it awaits approval by this Commission of PWW's financing request in the instant proceeding. At such time, the NHBFA will make a firm commitment to purchase/issue the bonds through its agency. PWW anticipates that the NHBFA Board of Directors will take final approval action with respect to the proposed financing plan as part of the overall bond approval process. As such, the Settling Parties agree that PWW will file documentation with the Commission of the NHBFA's subsequent approval action as soon as it becomes available.

It is anticipated that the G&C will consider approval of PWW's proposed financing on June 24, 2020. As such, the Settling Parties agree and recommend the Commission approve that PWW will file documentation with the Commission of the G&C's approval of the proposed financing prior to the issuance of the Commission's order approving the proposed financing.

E. Estimated Timeline of Bonding Process and Requested Issuance Date for Commission Order Approving Proposed Financing

The Settling Parties agree that PWW should take all steps necessary to close on the proposed financing and issue the taxable bonds by as soon as September 1, 2020 but by no later than early to mid-October, 2020. Resolution of the total debt service from this financing is instrumental to the proposed MOEF in PWW's DW 19-084 rate proceeding, discussed subsequently in this Agreement, and whether the MOEF will be able to fully support or replenish the MOERR-RSF on a going-forward basis. Additionally, PWW and its investment bankers consider it to be extremely important that this bond issuance be completed prior to the 2020 Presidential Election, as the impact of the results of that election upon the financial markets in the U.S. would most likely add another layer of uncertainty with regard to the overall cost of and ability to issue these bonds, during or after the election.

PWW estimates that it would take from 5-8 weeks to complete the entire process of documenting, processing, marketing, and closing on a bond issuance to the markets. The Company anticipates that process would not commence until after the Commission issues an order approving the proposed financing.

For the reasons previously described, including the desire to consummate the transactions as soon as possible, and in light of the timing for which this process is directly impactful on the concurrent rate proceeding in DW 19-084, which includes the requested approval of the MOEF along with other rate structure modifications, the Settling Parties agree and respectfully request that the Commission issue an order approving the proposed bond financing in the instant docket by no later than July 24, 2020.

IV. SETTLEMENT AGREEMENT - DOCKET NO. DW 19-084 RATE PROCEEDING

A. Revenue Requirement

1. Modifications to Structure of PWW's Revenue Requirement

The Settling Parties agree and recommend the Commission approve two modifications relative to the formulation of PWW's revenue requirement last approved in DW 16-806. The first, a Material Operating Expense Factor, or MOEF, is intended to be a permanent component of PWW's ratemaking structure. The second, a reduction in PWW's revenue requirement relative to anticipated debt service savings resulting from the Company's DW 20-055 bond financing, is intended to be a one-time adjustment applicable only to the approved revenue requirement in the instant rate proceeding.

a. Material Operating Expense Factor (MOEF)

The Settling Parties agree and recommend the Commission approve the establishment of a MOEF. The Settling Parties further recommend that the MOEF should become a permanent component of the revenue requirement structure utilized by PWW in the calculation of its permanent rates in this and subsequent rate proceedings.

The Settling Parties agree that the MOEF would work in similar manner to the Debt Service Revenue Requirement-0.1 (DSRR-0.1) established in DW 16-806 that provides a 10% over-cover for PWW's annual debt service obligations in order to satisfy debt lending requirements. In similar fashion, the MOEF would be a percentage factor applied to PWW's Material Operating Expense Revenue Requirement (MOERR) as established in each rate proceeding.[10] The result of which would be included in the Operating Expense Revenue Requirement (OERR) component of PWW's overall revenue requirement. Unlike the DSRR-0.1 revenue component, however, which remains fixed during each succeeding rate proceeding, the MOEF would be an adjustable factor, the sufficiency of which would be re-evaluated and revised, as necessary, in succeeding rate cases.

[10] The approved DW 16-806 Settlement Agreement, Commission Order No. 26,070 (November 7, 2017), at 12 defines the Material Operating Expense Revenue Requirement (MOERR) component as that consisting of all of the operating expenses included in PWW's overall Operating Expense Revenue Requirement (OERR) with the exception of those expenses specified as Non-Material Operating Expense Revenue Requirement (NOERR) items.

The intended purpose of the MOEF is to sufficiently enhance the MOERR portion of PWW's allowed revenues to better enable adequate cash flow coverage between rate cases for increases in material operating expenses experienced by the Company. The MOEF would be specifically established so as to enable PWW to adequately maintain the MOERR-RSF at its established imprest level. Thus, in each rate proceeding, the MOEF would be re-established in conjunction with the MOERR-RSF. It is anticipated that doing so would enable the MOERR-RSF to become a more effective buffer against unanticipated revenue fluctuations due to weather as well as the impact of regulatory lag experienced by the Company, which, for PWW, is exacerbated by the fact that it is a debt-only financed utility.

For purposes of the instant rate proceeding, the Settling Parties agree and recommend the Commission approve a MOEF not to exceed 9.50%. The Settling Parties agree that such would enable PWW to adequately maintain the MOERR-RSF at the recommended imprest level of $2,850,000[11] through the Company's next rate proceeding, which is currently anticipated to be finalized in 2023. The financial model in support of the adequacy of the recommended 9.50% MOEF is attached to this Agreement as Appendix 2, Attachment B.

The Settling Parties recognize that the MOEF will increase the revenues of the Company. However, ratepayers are protected from this additional revenue requirement, because, as noted in Section II, A of this Agreement,the order approving the settlement agreement in DW 11-026 places limitations on the dividends paid by PWW to its sole shareholder. The Settling Parties agree that these limitations are an underlying principle to this and previous ratemaking structure

[11] The Commission previously approved an imprest level for the MOERR-RSF in Order No. 26,070 in Docket No. DW 16-806. In this Agreement, the Settling Parties are recommending the MOERR-RSF remain at that level.

changes and agree that once the City Bond has been paid in full and the CBFRR is reduced to zero, that the dividend payments by PWW will effectively be reduced to zero.

b. Anticipated Cash Flow Savings from DW 20-055 Financing

As previously discussed, the Settling Parties anticipate significant cash flow savings with regard to PWW's debt service requirements to result from the proposed bond financing in DW 20-055. As such, the Settling Parties agree and recommend the Commission approve that any net savings realized from the DW 20-055 bond issuance shall be incorporated into the calculation of the final permanent revenue requirement to be approved in this rate proceeding. The Settling Parties further agree that this is a one-time adjustment to PWW's revenue requirement structure, anticipated to only be applicable within the instant rate proceeding. It is currently anticipated that the bond closing and associated realization of these debt service savings will occur during September 2020.

2. <u>Estimated Revenue Requirement</u>

Based on the proposed modifications to PWW's revenue requirement structure described above, the Settling Parties have provided an estimated calculation of the Company's revenue requirement. See Appendix 2, Attachment C, Summary (middle column). The estimated calculation is based on a scenario whereby the proposed bonds contemplated in DW 20-055 are issued at an all-in total interest cost of 3.67%, which would result in year-one net annual debt service savings of $970,374[12] (line 17), which after applying the 1.1x debt service factor (line 18), would result in a realized reduction in PWW's revenue requirement of $1,067,411 (line 19). That would also enable the Company to fully implement the proposed MOEF at the full 9.50%

[12] See Appendix 1, Attachment A, Page 1.

(line 10) proposed by the Settling Parties, resulting in an increase in the OERR component of PWW's revenue requirement by $1,799,471 (line 10).

Upon implementation of these modifications, the CBFRR would be $7,729,032 (line 1), the OERR would be $21,296,617 (line 12), and the unadjusted DSRR of $7,702,894 (line 15) combined with the estimated savings from DW 20-055 of $1,067,411 (line 19) would result in an adjusted DSRR of $6,635,482 ($7,702,894 - $1,067,411). Combined, the Settling Parties calculate an estimated total revenue requirement for PWW of $35,661,131 (line 21), of which, after eliminating pro forma other operating revenues of $420,712 (line 22), would result in $35,240,419 (line 23) in revenues to be derived from base rates. This represents a base rate revenue increase of $3,591,103, or 11.35% (line 25).

However, since the Company's pro forma test year includes pro forma QCPAC revenues granted in DW 18-022 and DW 19-029[13] amounting to $1,248,097 (line 26), which, per the parameters of the QCPAC mechanism approved in DW 16-806, are subsumed into the proposed base rate revenues of $35,240,419, the actual increase in billed water revenues to be realized from customers, based on DW 19-084 and DW 20-055, is $2,343,006, or 7.40% (line 27).

3. <u>Maximum Revenue Requirement</u>

The Settling Parties agree and recommend the Commission approve a proposed maximum revenue requirement for the Company that shall not exceed the percentage increase in water revenues from base rates proposed in PWW's original rate filing of 11.91%. The calculation of which is contained in Appendix 2, Attachment C, Summary (right column). As such, the Settling Parties agree and recommend the Commission approve a total revenue

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[13] See, *Pennichuck Water Works, Inc*., Docket No. DW 18-022, Order No. 26,183 (October 29, 2018); and *Pennichuck Water Works, Inc.*, Docket No. DW 19-029, Order No. 26,247 (May 3, 2019).

requirement for PWW not to exceed $35,839,461 (line 21), and a maximum amount of water revenues to be derived from base rates of $35,418,749 (line 23).

This calculation is based on a scenario whereby the proposed bonds contemplated in DW 20-055 are issued at an all-in total interest cost of 4.67%, which would result in year-one net annual debt service savings of $490,585[14] (line 17), which after applying the 1.1x debt service factor (line 18) would result in a reduction of $539,644 (line 19) in PWW's unadjusted DSRR from $7,702,894 (line 15) to an adjusted DSRR of $7,163,250 ($7,702,894 - $539,644). In order not to exceed the stipulated maximum revenue requirement, the Company would apply a MOEF of only 7.66% (line 10), rather than 9.50% as previously stipulated, thereby increasing the OERR component of PWW's revenue requirement by $1,450,033 (line 11) to $20,947,179 (line 12). With the addition of the CBFRR of $7,729,032 (line 1), the combined elements result in the proposed maximum revenue requirement of $35,839,461 (line 20).

The resulting maximum increase in base rate revenues would be $3,769,433, or 11.91% (line 25). However, after taking into account the fact that PWW's pro forma test year includes QCPAC revenues of $1,248,097 (line 26), as explained previously, the increase in total annual billed water revenues realized from customers, based on DW 19-084 and DW 20-055, is estimated to be $2,521,336, or 7.97% (line 27).

4. <u>Summary of Requested Commission Approvals in DW 19-084</u>

In addition to the Commission order previously requested in this Agreement for approval of the proposed bond financing in DW 20-055, the Settling Parties agree and recommend the Commission issue two further orders relative to the DW 19-084 rate proceeding, as follows:

[14] See Appendix 1, Attachment A, Page 2.

a. Initial Order Approving Proposed Modifications to PWW's Ratemaking Structure

The Settling Parties agree and recommend that the Commission issue an initial order approving the structural modifications to PWW's ratemaking mechanism including the MOEF and the application of anticipated debt service savings from DW 20-055 discussed previously, as well as the other proposed modifications to PWW's overall ratemaking structure that will be subsequently discussed. The Settling Parties agree that an order issued as soon as possible approving these proposed rate structure modifications will be important to the bond issuance process in DW 20-055 so as to provide the bond rating agency and potential creditors assurance that PWW is instituting measures to resolve its cash coverage issues as well as stabilize and maintain its cash reserves. It is anticipated that a Commission Order approving these measures may even result in an improvement to PWW's credit rating, and therefore, possibly a reduction in the overall anticipated interest rate of the contemplated bond issuance. The importance of which would be that it would enable the Company, relative to both its DW 20-055 and subsequent financings, to 1) gain access to the debt markets, and 2) attract the lowest cost of borrowings possible. Such would ultimately benefit PWW's customers through lower water rates.

Therefore, given the fact that a bond closing could be achieved as soon as 5-8 weeks following Commission approval of the DW 20-055 financing petition, and the positive impact and potential savings that may result relative to that bonding process if approvals are granted regarding the proposed rate structure modifications in the instant docket, the Settling Parties agree and respectfully request the Commission issue an initial order in this proceeding approving those rate structure modifications by no later than July 31, 2020.

The Settling Parties emphasize that the requested initial order will not result in the immediate establishment of a rate increase for PWW's customers, but, merely, the establishment of revenue requirement modifications to be employed in the subsequent determination of a proposed revenue requirement and resulting customer rates to be submitted for Commission approval during the Fall of 2020, as discussed below. The Settling Parties further emphasize that the proposed rate making modifications requested for initial Commission approval will not eventually result in the establishment of a proposed base rate revenue requirement that exceeds $35,418,749, as discussed previously.

The Settling Parties further agree that the proposed permanent rate tariffs, submitted by the Company on July 1, 2019, with an effective date of August 1, and suspended for a period of 12 months by Order No. 26,279 (July 31, 2019), will not take effect.

b. Subsequent Order Approving Revenue Requirement and Rates

The Settling Parties agree and recommend the Commission issue a subsequent order after the closing date of PWW's anticipated bond issuance in DW 20-055, approving a revenue requirement and customer rates that are reflective of the actual debt service savings realized by the Company as a result of that bond issuance. As previously recommended, the approved revenue requirement from base rates shall not exceed $35,418,749, reflecting a percentage increase of 11.91% as originally proposed by PWW in its initial rate filing.

To facilitate the institution of rates resulting from this rate proceeding, the Settling Parties agree and recommend the Commission approve that PWW shall file its final proposal for a revenue requirement along with a final calculation of permanent rates by no later than twenty-one (21) days after the closing date of the bond issuance in DW 20-055. PWW's subsequent filing is currently anticipated to occur by mid- to late-September 2020. As previously recommended, the final revenue requirement proposed by PWW shall incorporate the full net debt service savings realized by the Company as a result of the DW 20-055 bond issuance. The Settling Parties further agree that the only modifications that may result to the estimated revenue requirement calculations appearing on Appendix 2, Attachment C, Summary (middle/right columns) previously discussed, will be to the MOEF (line 10), the MOEF Calculated Amount (line 11), the OERR (line 12), the Debt Service Savings from DW 20-055 (line 17), the calculated Reduction in Revenue Requirement (line 19), and the Proposed Revenue Requirement (line 20) as well as the following (lines 21, 23, 25, and 27).

The Settling Parties further agree and recommend that Staff and the Parties issue recommendations to the Commission regarding PWW's proposed final revenue requirement and resulting rates by no later than twenty-one (21) days following the Company's submission. The Settling Parties agree and respectfully request the Commission issue its subsequent order approving PWW's revenue requirement and resulting customer rates in the instant proceeding by no later than thirty (30) days following the filing of recommendations by Staff and the other Parties.

The Settling Parties further agree and acknowledge that the permanent revenue requirement and resulting rates will not be set until after the 12 month suspension period and investigation initially set by the Commission in Order No. 26,279. The Settling Parties further agree that, despite the extension beyond the 12 month investigatory period, and dependent upon Commission approval of the Settlement Agreement, a rate increase will not be instituted until approved by the Commission in the subsequent order issued, as described above.

B. Other Modifications to PWW's Overall Ratemaking Structure

1. Modification to the Calculation of the 5-Year Average for Revenues

As part of the modifications approved in DW 16-806, PWW calculates its revenue requirement based on a trailing 5-year average for revenues. With regard to the instant rate proceeding, the calculation of the 5-year average would have encompassed the years 2014 through 2018. However, as stated in the direct pre-filed testimony of Donald L. Ware (Bates 64), 2016 was a drought year resulting in record water consumption by its customers. As such, the inclusion of 2016's data in the 5-year average calculation would have provided for a significantly skewed result leading, ultimately, to a possible understatement of PWW's calculated revenue requirement. As such, PWW proposed the elimination of the Company's 2016 data and a trailing average revenue calculation based on the four remaining years. Staff, however, argued that the calculation of the Company's trailing average revenues should be based on a full 5-years of data so as to conform with that which was approved in DW 16-806.

As a result, the Settling Parties agree and recommend the Commission approve that in rate proceedings where an "atypical" year would be included in the calculation of PWW's 5-year trailing average for revenues, that "atypical" year's data would be substituted for data from the next most recent preceding typical operating year's data. The Settling Parties further agree that an "atypical" year should be defined as one in which that year's water consumption either exceeds or falls short of the calculated trailing 5-year average of water consumption by more than 15%.[15] The Settling Parties also agree that this should be a permanent modification to PWW's overall ratemaking structure.

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[15] For purposes of determining whether an "atypical" year exists, that calculation shall be based on the trailing 5-year average of the test year as well as the four immediately preceeding years. Therefore, the

With regard to the instant rate proceeding, the Settling Parties agree that the consumption data for 2016 would classify it as an "atypical" year for purposes of providing an accurate calculation of PWW's trailing 5-year revenue average. As such, the Settling Parties further agree and recommend the Commission find that PWW's operating data for 2016 should be replaced by the data from the next most recent preceding typical operating year, or 2013, for purposes of calculating the Company's trailing 5-year revenue average in this proceeding.

2. <u>Inclusion of Actual NHBET Cash Payment in Revenue Requirement</u>

As stated in the pre-filed testimony of Larry D. Goodhue (Bates 40), recent changes occurring to Federal tax laws will result in a more rapid than anticipated exhaustion of available Net Operating Loss (NOL) carryforwards that are used to offset current taxable income. As a result, PWW may be subject to actual cash costs related to Federal Income Taxes prior to its next fully promulgated rate proceeding. Additionally, the Company currently incurs actual cash payments relative to both the corporate Business Profits Tax (BPT) and Business Enterprise Tax (BET) assessed by the State of New Hampshire (NH), regardless of its NOL carryforward position. In its original filing, PWW requested the inclusion of the actual cash costs incurred for Federal income taxes and NH business taxes in the OERR component of its allowed revenues in this and future permanent rate cases. The purpose of which would be to have the necessary cash available from rates to pay these annual obligations. The Company's pro forma test year in this proceeding, however, only reflects PWW's actual cash payment relative to the NHBET in the amount of $103,249 but does not include cash payments relative to either the NHBPT or Federal income taxes.

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underlying trailing 5-year average data used in that determination shall be inclusive of the data pertaining to the potential "atypical" year.

As such, the Settling Parties agree and recommend the Commission approve that the actual cash cost of taxes for the NHBET should be included as an MOERR component of PWW's overall revenue requirement in this and future rate proceedings. The Settling Parties further agree that consideration of the inclusion of any actual cash outlays associated with the NHBPT and Federal income taxes in the Company's revenue requirement should be deferred to PWW's next rate proceeding.

3. Re-Prioritization of Usage of Available DSRR-0.1 Funds

Per the approved ratemaking mechanism in DW 16-806, revenues collected by PWW via its DSRR-0.1 component of its overall revenue requirement are deposited in a DSRR-0.1 account. See Appendix 2, Attachment A. Further, the current priority relative to the usage of any funds available in the Company's DSRR-0.1 account is as a funding source for PWW's annual capital improvements program so as to mitigate the incurrence of debt by the Company. However, as stated in the direct pre-filed testimony of Larry D. Goodhue (Bates 41), the present priority for uses of the DSRR-0.1 funds are illogical, especially in light of the present necessity for the Company to stabilize its MOERR-RSF and avert diminishment of all its RSFs between general rate proceedings.

Therefore, the Settling Parties agree and recommend the Commission authorize that, effective January 1, 2021 and thereafter, the Company re-prioritize its usage of funds available in its DSRR-0.1 account in the following manner, by order of priority: 1) fund the cost of PWW's deferred assets (i.e. studies, engineering design work completed in advance of construction bids and construction, and other intangible assets) that do not qualify for debt financing and, thus, QCPAC recovery; 2) replenish PWW's RSF fund balances to their fully approved imprest values; and 3) fund PWW's capital improvements, as previously authorized in DW 16-806.

4. <u>Recovery of SRF and DWGTF Debt Issuance Costs</u>

Prior to its acquisition by the City, the debt issuance costs incurred by PWW to obtain loans through such programs as the State of New Hampshire's Drinking Water State Revolving Loan Fund (DWSRF) or Drinking Water and Groundwater Trust Fund (DWGTF) were recovered as part of its cost of debt via the annual amortization of these costs over the life of the loan. However, as explained in the direct pre-filed testimony of Larry D. Goodhue (Bates 44-45) under PWW's present ratemaking structure, the amortization of debt acquisition expenses associated with DWSRF and DWGTF loans are no longer recoverable as they are not included in the OERR component of PWW's overall revenue requirement. Although, on average these costs might be considered *di minimis.*[16] However, during a given year, such might represent an expense to the Company for which it has no cash coverage. By contrast, PWW is able to recover the debt issuance costs associated with its taxable and tax-exempt bonds by virtue of the fact that these costs are included as part of the overall bond issuances that are recovered via the DSRR component of its overall revenue requirement.

As a remedy to the cash coverage shortfall that PWW presently experiences relative to its debt acquisition costs incurred for procuring DWSRF and DWGTF loans, the Settling Parties agree and recommend the Commission authorize PWW, commencing as of January 1, 2021 and thereafter, to record such costs in its Outside Services Expense account to be recovered through the OERR revenue component of its overall revenue requirement. It should be noted that per the approved Settlement Agreement in DW 16-806, Outside Services Expense is classified as a Non-

[16] Based on the Company's response to Staff 1-12 (Exhibit 10), the average issuance costs associated with these loans are approximately $7,200 . Additionally, the Company, on average, has procured one such loan each year during the ten years leading up to and including its 2018 test year.

Material Operating Revenue Requirement (NOERR) account. As such, there would be no cash over-cover for these expenses through PWW's MOERR-RSF.

5. **<u>Re-establishment of Imprest Levels of RSF Accounts Retention of Reconciliation Mechanism</u>**

The Settling Parties agree and recommend that the Commission approve the re-establishment of the imprest values of the CBFRR-RSF, MOERR-RSF and DSRR-1.0-RSF at the respective levels provided for and approved in Docket No. DW 16-806. Specifically, the CBFRR-RSF at $680,000; the MOERR-RSF at $2,850,000; and the DSRR-1.0-RSF at $390,000. For purposes of this rate proceeding, these funds will be restored to the proposed imprest values on a one-time basis via a portion of the proceeds received from the proposed bond financing in DW 20-055. See Appendix 2, Attachment B.

In Docket No. DW 11-026, an RSF reconciliation mechanism was established wherein the Commission required PWW to maintain the target amount for the original $5 million rate stabilization fund through adjustments, i.e. charges or credits, to PWW's revenue requirement in connection with its full rate proceedings. Subsequently, with the reallocation of $3.92 million of the original rate stabilization fund amongst PWW's CBRFF-RSF, MOERR-RSF, and DSRR-1.0-RSF in Docket No. DW 16-806, as previously discussed, the original RSF reconciliation feature in Docket No. DW 11-026 was retained and applied to the established targets of the three RSF accounts. The Settling Parties agree and affirm the continuation of the RSF reconciliation mechanism in PWW's subsequent rate proceedings, whereby the target RSF balances will be maintained via charge or credit adjustments to PWW's established revenue requirements in those proceedings. Further, the Settling Parties agree that the addition of the MOEF will not alter that reconciliation mechanism. See Appendix 2, Attachment A.

C. Permanent Customer Rates

1. Background

An ACOSS was conducted by Concentric Energy Advisors to implement an overall rate increase of 11.91%. The ACOSS recommended the following rate increases by customer class: General Metered (G-M) and Special Contracts 7.85%; Municipal Fire Customers – 24.20%; and Private Fire Customers – 72.09%. There was also a recommendation to shift the split of G-M revenues from 35.5% fixed / 64.5% volumetric to 42.8% fixed / 57.2% volumetric. However, the Company recommended in testimony not implementing this shift because it would: 1) cause the largest rate impact on the small users, especially retired rate payers; 2) discourage conservation due to the lower volumetric rate; and 3) result in less revenues from the Company's special contract customers who already benefit from a reduced volumetric rate. Due to municipal budget considerations, the Settling Parties negotiated a more gradual implementation of the 24.20% increase to the Municipal Fire rate class but provided for a return in later years to those customers seeing a larger percentage increase than the recommended 7.85% (under the maximum revenue requirement scenario) in the first year.

2. Specific Settlement Terms Regarding Proposed Phase-in

The Settling Parties agree and recommend the Commission approve a modification to the percentage allocations to the rate-class recommendations contained in the original ACOSS. The modifications appear below. Appendix 2, Attachment D, Page 1 contains calculations and projected rate impacts based on the maximum proposed increase in PWW's revenue requirement from base rates of 11.91%. Appendix 2, Attachment D, Page 2 contains calculations and projected rate impacts based on the estimated increase in PWW's revenue requirement from base rates of 11.35%. Appendix 2, Attachment D, pages 3 and 4 contain the percent changes (increase and decrease) among customer classes in years one and two as a result of the COSS settlement phase-in under both the 11.91% and 11.35% revenue requirement increase scenarios, respectively. For illustrative purposes,the following terms are based on the proposed maximum increase in revenues from base rates of 11.91%.

a. The monthly customer charge for G-M Residential Fixed will increase by 7.85%.

b. All Other G-M Charges, including G-M Residential Volumetric and rates for Municipal Fire Protection Service will increase by 10.25%.

c. Special Contract customers' rates shall be adjusted in accordance with the terms of the existing special contracts.

d. The rates for Private Fire Protection Service will increase by 72.09%.

e. During each subsequent year following initial implementation of the new rates and ending with year 6, the Municipal Fire Protection Service rates will increase by 3.00% over the prior year's rate. Concurrently, all Other G-M Charges[17] will decrease by a corresponding percentage designed to equalize the previously approved revenue requirement. For example, during the first subsequent year, Other G-M Charges will decrease by approximately 0.53%. During the second subsequent year, these charges will decrease by approximately 0.55%.

f. In PWW's next rate case, with a projected test year 2021, the adjustments described in (d) will be applied prior to implementation of the revenue requirement approved in that proceeding. The approved revenue requirement will then be applied uniformly across all rate classes. A similar process will be applied with regard to the subsequent rate case, with a projected test year of 2024.

g. PWW shall undertake its next ACOSS in conjunction with its third subsequent rate case following the instant proceeding, with a projected test year of 2027.

[17] This specifically excludes G-M Residential Fixed Charges, Private Fire Protection Service Charges, and Special Contract Fixed Charges.

The Settling Parties further agree that in the likely event that PWW's approved revenue increase from base rates is less than 11.91%, the above parameters will be adjusted on a pro-rata basis after issuance of the Commission's subsequent order in this proceeding approving a finalized revenue requirement that is reflective of the actual debt service savings realized by the Company from its DW 20-055 bond issuance.

3. <u>Projected Impacts on Residential Customers</u>

The Settling Parties agree that under the scenario whereby the estimated overall increase in PWW's revenue requirement from base rates is 11.35%, PWW's residential customers will realize an increase of $4.49 in their average monthly bills ($53.88 on an annual basis) from approximately $51.02 per month to approximately $55.51 per month. If the QCPAC surcharges customers already pay is factored into the increase, the net increase is only $2.42 per month. The Settling Parties further agree that under the scenario whereby the overall increase in PWW's revenue requirement from base rates results in the stipulated 11.91% maximum increase, PWW's residential customers will realize an increase of $4.71 in their monthly bills ($56.52 on an annual basis) from approximately $51.02 per month to approximately $55.73 per month. The Settling Parties agree that these projections are based on an average residential monthly usage amount of 7.77 ccf.

D. <u>Effective Date for Permanent Rates</u>

1. The Settling Parties agree and recommend that the effective date for Permanent Rates shall be pursuant to the Commission's order in this proceeding regarding the settlement agreement on temporary rates presented at hearing on May 13, 2020, and specifically, the Commission's decision in that order regarding an appropriate effective date for temporary rates in this proceeding.

2. Pursuant to RSA 378:29, in order to reconcile the difference between temporary rates and permanent rates, the Settling Parties agree and recommend the Commission authorize PWW to charge customers an amount equal to the difference between the revenues the Company would have collected had the agreed upon level of permanent rates been in effect for service rendered on and after the established effective date for temporary rates through the issuance date of the Commission's subsequent order in this proceeding approving a finalized revenue requirement (the recoupment period), and the actual revenues collected by PWW during that recoupment period. Upon the issuance of the Commission's subsequent order approving a finalized permanent rate revenue requirement and resulting customer rates in this proceeding, PWW agrees to file, within thirty (30) days of that order, a calculation of the temporary-permanent rate recoupment and a surcharge recommendation for Commission review and approval. PWW agrees to calculate the surcharges based on each customer's actual usage during the recoupment period. The Settling Parties agree that they will have an opportunity to review PWW's proposal and provide recommendations to the Commission for its consideration prior to the issuance of an order.

The resulting surcharge shall be reflected as a separate item on all customers' bills. Upon receipt of the Commission's order approving a temporary-permanent rate recoupment, PWW agrees to file, within fifteen (15) days of that order, a compliance tariff supplement including the approved surcharge relating to the total recoupment of the difference between the level of temporary rates and permanent rates, as well as the average monthly surcharge for each customer class based on customers' individual usage.

E. Additional Requirements for Monthly, Semi-Annual and Annual Reporting

Given the issues previously described with regard to PWW's difficulties relative to cash flow coverage and maintaining an adequate cash balance in its respective RSF reserve accounts, resulting in the proposed establishment of the MOEF as well as other rate structure modifications, the Settling Parties agree and recommend the Commission approve that in addition to other Commission reports required from PWW by rule and by statute that, commencing on January 1, 2021, the Company shall file the following additional reports with the Commission:

1. Monthly Reporting

The Settling Parties agree and recommend the Commission approve that PWW will file the following monthly reports with the Commission within forty-five (45) days after the last day of the reported month:

a. **Income Statement** showing monthly and year-to-date activity.

b. **Balance Sheet** by month and to date including the GAAP basis cash balances of the CBFRR-RSF, MOERR-RSF, DSRR-1.0-RSF, and DSRR-0.1 accounts.

2. Semi-Annual Reporting

The Settling Parties agree and recommend the Commission approve that PWW will file the following semi-annual reports with the Commission within forty-five (45) days after June 30 and within ninety (90) days after December 31:

a. **Detailed Debt Service Schedule** showing the actual principal and interest cash payments made by the Company on each of its outstanding debt issuances.

b. **NHBET and NHBPT** actual cash payments made or refunds received.

c. **<u>Federal Income Tax</u>** actual cash payments made or refunds received.

d. **<u>MOERR Variance Report</u>**: The Company will provide a written narrative for year-to-date amounts as of June 30 and December 31, substantiating and explaining the major items that comprise the difference between actual current year MOERR expenses versus the allowed MOERR expenses as authorized from the most recently completed permanent rate case. This report will provide the basis and explanation for up to 80% of the MOERR expense differential, as it relates to the overall aggregate dollar difference.

3. Annual Reporting

In addition to the annual report filing required from PWW in accordance with N.H. Admin. R., Puc 609.04 and 609.14, the Settling Parties agree and recommend the Commission approve the following additional reports to be provided by PWW with that filing:

a. **<u>Reconciliation of Net Income/Loss with Calculated Revenue Surplus/Deficit</u>**: An annual reconciliation of PWW's actual Net Income/Loss as reported on Schedule F-2 of its Annual Report with its recognized Revenue Surplus/Deficit as calculated based on the ratemaking structure approved in DW 16-806 and modified in the instant rate proceeding.

b. **<u>Reconciliation of Cash and Regulatory RSF Account Balances</u>**: A reconciliation of the year-end cash balances of the CBFRR-RSF, MOERR-RSF, and DSRR-1.0-RSF accounts with the respective year-end regulatory balances of the CBFRR-RSF, MOERR-RSF, and DSRR-1.0-RSF. (Regulatory Balance is defined as that relating to the revenue and expenditure general ledger activity relative to the respective RSF accounts. This is not the same as the GAAP basis cash balances of the respective RSF accounts.)

F. Resolution of Repeat Audit Issues

During the Commission Audit Staff's review of PWW's financial information relative to this rate proceeding, it made several audit findings contained in its Final Audit Report dated November 6, 2019 to which the Company expressed disagreement. Certain of these findings have been cited by the Audit Staff in previous examinations of the Company, but because there was no specific resolution for such within the context of an approved rate case settlement, these issues continue to be areas of dispute between the Audit Staff and PWW. Therefore, in an effort to resolve both existing or potential long-standing audit disputes between the Company and Staff, and for purposes of achieving administrative efficiency in future rate proceedings, the Settling Parties present for the Commission's approval the following proposed resolutions of certain outstanding audit issues cited by the Audit Staff in its report.

1. Audit Issue # 2: Allocation of Return of Common Assets

The Audit Staff included a finding that PWW's calculation for Return on Common Assets allocated to its affiliates included five deferred accounts relating to post-retirement benefits, and that these same five deferred accounts were included in the same calculation relating to PWW's determination of "Unfunded FAS 106 and FAS 158 Costs" relative to the income tax effect of certain post-retirement costs. The overall calculation resulted in the determination of a return on certain common assets held by PWW and its affiliates, which was to be allocated amongst the affiliates. The Audit Staff concluded that, with regard to the post-retirement accounts, the costs related to which were being double-counted, thus resulting in a potential over-allocation of expense.

Staff made further inquiries of PWW through discovery with regard to this Audit Issue. Based on the Company's responses, Staff concluded that the inclusion of the five deferred post-retirement accounts in the first instance was to ensure that the return on the full pre-tax value of these accounts was properly allocated to the Company's affiliates. With regard to the second instance relative to the calculation of "Unfunded FAS 106 & FAS 158 Costs", Staff concluded that the purpose of this calculation was to ensure that the tax effect associated with these post-retirement accounts was also properly incorporated within the return allocated to PWW's affiliates. Therefore, the Settling Parties agree and recommend the Commission find that

PWW's computation of Return on Common Assets allocated to its affiliates as it specifically pertains to the Company's post-retirement accounts is just and reasonable.

2. Audit Issue # 4: Accounting for Principal Forgiveness on DWSRF Loans

With regard to certain DWSRF loans held by the Company that contain principal forgiveness provisions, the Audit Staff concluded that PWW's accounting of the principal forgiveness on these loans ultimately results in an understatement of the Company's Contributions in Aid of Construction (CIAC) and an overstatement of its recognized Gains on Disposition of Assets. PWW, however, argued that, given the fact that the principal forgiveness associated with these loans is not necessarily guaranteed, it has no choice but to account for such in the manner that it does. It is Staff's conclusion that, since under PWW's approved ratemaking structure neither the balance of the Company's CIAC account nor its Gain on Disposition of Assets account impacts the calculation of its revenue requirement, the present methodology employed by PWW to account for principal forgiveness on its DWSRF loans is acceptable. As such, the Settling Parties agree and recommend the Commission find that PWW's current methodology for accounting for principal forgiveness on its DWSRF loans is appropriate.

3. Audit Issues # 7, # 9, and # 10: Inclusion of Net Non-Operating Revenues in Company's Revenue Requirement Calculation

The Company currently records its jobbing revenues and associated jobbing expenses in the accounts specified by the Uniform System of Accounts (USoA) for Water Utilities. However, also according to the USoA, jobbing revenues and expenses are classified as non-operating, or "below-the-line" accounts. During the 2018 test year PWW recorded jobbing revenues of $337,556 and jobbing expenses of $145,582. The net of which, or $191,974, the Company included in its Other Operating Revenues for purposes of calculating its revenue requirement in the instant rate proceeding. The Audit Staff concluded that such classification was inappropriate based on the definition of these revenues and expenses as contained in the USoA (Audit Issue # 7). The Audit Staff further concluded that PWW's lack of compliance in this regard also contributed to its findings with regard to the balance of PWW's Allowance for Doubtful Accounts (Audit Issue # 9) as well as the Company's overall lack of compliance with aspects of the USoA (Audit Issue # 10). The Company argued that net jobbing revenues have been included in its other operating revenues in all of its previous rate cases dating back to 1996. PWW further argued that the inclusion of its net jobbing revenues in other operating revenues actually results in a benefit to ratepayers by reducing its calculated revenue requirement. As such, the Settling Parties agree and recommend the Commission find that PWW's inclusion of its net jobbing revenues in other operating revenues for purposes of calculating its overall revenue requirement is appropriate.

4. **Audit Issue # 8: Allocation of Revenues to Pennichuck Water Service Company**

The Audit Staff found that PWW receives monthly revenues from the City related to the purchase of water consumption data for purposes of the City's sewer billings. Of the revenues received from the City, 90% is allocated to PWW and 10% is allocated to its affiliate, Pennichuck Water Services Company (PWSC). During the test year, approximately $118,000 was received from the City for PWW's water consumption data, with approximately $106,000 allocated to PWW and approximately $12,000 allocated to PWSC. However, even though this allocation of revenues had been the Company's standard practice dating back to the mid-1990s, and accepted by the Commission, there is no longer an apparent reason for the apportionment of any of these revenues to PWSC. However, given 1) the *di minimis* amount of revenues allocated to PWSC during the test year, and 2) the Commission's past acceptance of this revenue allocation, the Settling Parties agree and recommend the Commission approve this allocation of revenues relative to the 2018 test year for purposes of calculating PWW's revenue requirement in the instant rate proceeding. The Settling Parties further agree and recommend that, commencing with the Company's 2020 operating year and following, any revenues received from the City for the Company's consumption data should be fully attributed to PWW, only.

G. Frequency of Rate Cases

In light of PWW's unique ratemaking structure that the Settling Parties have proposed be further modified in this rate proceeding including the establishment of a MOEF, and in light of the fact that PWW is a debt-only financed entity that is acutely sensitive to changes in in cash flow relative to factors such as weather changes, as well as the negative effects of regulatory lag, the Settling Parties believe that PWW should submit filings for general rate increases with the Commission on a frequent basis.

Therefore, the Settling Parties agree and recommend the Commission approve that PWW shall maintain a three-year full rate case cycle, such that PWW will file a general rate case, pursuant to RSA 378:3 and PART Puc 1604, every three years.

This settlement term is not intended to remove or otherwise modify the settlement term approved in the DW 16-806 settlement agreement, at section III, C, 3, d., requiring PWW to file a full rate case when the average of the amounts of cash held in the combined rate stabilization funds (CBFRR-RSF, DSRR-1.0-RSF, and MOERR-RSF) as of the last day of each month for the 13-month period ending December 31st of each year is greater than 150% of the combined target amount for such funds, as most recently established by the Commission. This settlement term is also not intended to limit PWW's ability to file for rate changes, pursuant to State law including

RSA Chapter 378, in the event PWW believes circumstances warrant filing for emergency rates or other rate relief.

The Settling Parties agree and recommend that the Commission require PWW to file its subsequent rate cases in accordance with the procedures and methodologies described in this Agreement, unless otherwise modified by the Commission, and consistent with the computations set forth in the exhibits and attachments to this Agreement.

H. Rate Case Expense Surcharge

The Settling Parties agree and recommend the Commission approve PWW's recovery of its reasonable rate case expenses for this proceeding through a surcharge. PWW's rate case expenses may include, but are not limited to, legal and consultant expenses, incremental administrative expenses such as copying and delivery charges, and other expenses allowed under Puc 1906.01. PWW agrees to file its final rate case expense request, pursuant to Puc 1905.02, no later than thirty (30) days from the date of the Commission's subsequent order in this proceeding approving PWW's finalized revenue requirement and resulting customer rates, anticipated during the Fall of 2020. The Settling Parties agree that they will have an opportunity to review the rate case expenses and provide recommendations to the Commission for approval.

I. Phased-In Effective Dates to Mitigate Impact on Customer Bills

In light of the recent financial strain experienced by New Hampshire residents and PWW's customers as a result of the COVID-19 Emergency, but also in recognition of the importance of timely rate relief for PWW as previously discussed, the Settling Parties propose to sequence implementation of certain rate increases and surcharges in order to balance the interest of customers in mitigating bill impacts and PWW's interest in timely rate relief. As illustrated in Appendix 2, Attachment E, and assuming issuance of the Commission's subsequent order in this proceeding approving a finalized revenue requirement for October 2020 and resulting in the issuance of affected customer bills also in October 2020, the Settling Parties recommend that PWW:

1. Commence implementation of its 2020 QCPAC surcharge one month following the implementation of new base rates (currently estimated to commence with November 2020 customer bills payable in December 2020);

2. Commence implementation of its 2020 QCPAC recoupment one month following the implementation of new base rates and extend the recovery period for such over four months (currently estimated to commence with November 2020 customer bills payable in December 2020 and continuing through February 2021 customer bills payable in March 2021);

3. Commence implementation of its rate case expense recovery surcharge five months following the implementation of new base rates, at the earliest, but no sooner than one month following the billing of the last monthly 2020 QCPAC surcharge, and extend the recovery period for such over twelve months (currently estimated to commence with March 2021 customer bills payable in April 2021, and continuing through February 2022 customer bills payable in March 2022); and

4. Commence implementation of the temporary - permanent rate surcharge three months following the implementation of new base rates, at the earliest, but no sooner than two months following the initial implementation of the 2020 QCPAC surcharge and recoupment, and extend the recovery period for such over eighteen months (currently estimated to commence with January 2021 customer bills payable in February 2021, and continuing through June 2022 customer bills payable in July 2022).

The above implementation months are illustrative, only, and will be affected by the timing of the Commission’s orders approving rate changes. The Settling Parties request that if the Commission’s subsequent order approving a revenue requirement and resulting customer rates is issued after October 2020, that the Settling Parties be allowed to revise their recommended sequencing of rate changes to balance PWW’s and customers’ interests.

J. PWW's Motion for Confidential Treatment

With its original rate filing, PWW filed a Motion for Protective Order and Confidential Treatment of Confidential and Payroll Information (Motion) in accordance with N.H. Admin. R. Puc 203.08 and RSA 91-A:5. Specifically, PWW requested confidential treatment of certain officer and director compensation not included in PWW's Annual Report, but provided at Tab 28 of its rate filing with respect to Puc 1604.01(a)(14). The Company stated that this information falls within the RSA 91-A:5, IV exemption because the information relates to internal personnel practices and is confidential financial information. Additionally, disclosure of this information would result in an unwarranted invasion of personal privacy for the officers and directors involved. PWW also requested confidential treatment concerning the disclosure of certain salary information and job titles provided at Tab 11, Schedule 1, Attachment F, Pages 3 and 4 of its rate filing with respect to Puc 1604.07(a)(5) and Puc 1604.07(j). PWW stated that this information also falls within the RSA 91-A:5, IV exemption because the information relates to internal personnel practices, is confidential financial information, and that its employees have a privacy interest in their pay data. Further, the Company stated that disclosure of this information would also cause PWW competitive harm because it would make it more difficult to attract or retain qualified employees. Salary data was also subject to discovery in this proceeding as Staff 1-28, Staff 1-37, Staff 2-30, and Staff 2-32 or attachments thereto. As such, the Settling Parties agree and recommend the Commission approve PWW's motion and protect from public disclosure the confidential payroll information.

IV. CONDITIONS

A. The Settling Parties expressly condition their support of this Agreement upon the Commission's acceptance of all its provisions, without change or condition. If the Commission does not accept the provisions in their entirety, without change or condition, any party hereto, at its sole option exercised within 15 days of such Commission order, may withdraw from this Agreement, in which event it shall be deemed to be null and void and without effect and shall not be relied upon by any Settling Party to this proceeding or by the Commission for any purpose.

B. The Commission's acceptance of this Agreement does not constitute continuing approval of, or precedent regarding, any particular principle or issue in this proceeding, but such acceptance does constitute a determination that the adjustments and provisions set forth herein in their totality are just and reasonable and consistent with the public interest. In its order addressing the approvals recommended in this Agreement, the Commission should expressly find that the approvals recommended herein are unique to this case and should not be viewed as having precedential impact with respect to any particular principle or issue in this proceeding for any other case or situation for reasons.

C. The discussions that produced this Agreement have been conducted on the explicit understanding that all offers of settlement relating thereto are and shall be confidential, shall be without prejudice to the position of any party or participant representing any such offer or participating in any such discussion, and are not to be used in connection with any future proceeding or otherwise.

D. This Agreement may be executed in counterparts.

IN WITNESS WHEREOF, the Settling Parties have caused this Agreement to be duly signed by their respective fully-authorized representatives.

Pennichuck Water Works, Inc.

Date: June 24, 2020

Marcia A Brown

By its Attorney, Marcia A. Brown
For Docket No. DW 19-084

Date: June 24, 2020

By its Attorney, Richard W. Head
For Docket Nos. DW 19-084 and DW 20-055

Staff of the New Hampshire Public Utilities Commission

Dated: June ___, 2020

By its Attorney, Christopher Tuomala

Office of the Consumer Advocate

Dated: June ___, 2020

By its Attorney, Christa Shute

City of Nashua

Dated: June ___, 2020

By its Attorney, Steven A. Bolton

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City of Nashua

Dated: June 24, 2020

By its Attorney, Steven A. Bolton

Pennichuck Water Works
2020 Refunding Analysis

LDG-3

Appendix 1 - Attachment A Pro Forma Financial Net Debt Service Cash Flow

1) Taxable Bonds with Level Debt Service

Bond Year	Current Annual Debt Service						(A)							(B)	(A)-(B)
Ending Dec. 31	2014A Total	2014B Total	2015A Total	2015B Total	2018A Total	2018B Total	Total Aggregate Debt Service Total	Total Debt Service: 2020 Refunding	Total Savings: 2020 Refunding	2020 New Money Debt Service (2)	AULI Savings	2020 New Money + Refunding DS	Total Refunding Savings	Estimated New Aggregate DS	Cash Flow Savings
2021	2,789,469	320,150	1,459,238	193,375	204,375	190,000	5,156,606	3,224,420	1,217,661	279,616	32,328	3,504,036	1,249,990	4,186,232	970,374
2022	2,793,344	320,088	1,462,363	192,500	204,375	200,000	5,172,669	3,219,023	1,229,183	277,418	34,088	3,496,441	1,263,271	4,186,816	985,853
2023	2,793,969	319,800	1,463,738	191,375	204,375	210,000	5,183,256	3,218,001	1,231,080	280,153	30,412	3,498,154	1,261,492	4,201,917	981,340
2024	2,786,469	324,175	1,458,488	190,000	204,375	220,000	5,183,506	3,220,999	1,213,957	277,799	31,714	3,498,799	1,245,671	4,215,635	967,871
2025	2,790,594	323,213	1,461,488	193,250	204,375	230,000	5,202,919	3,222,425	1,222,906	280,311	32,988	3,502,737	1,255,894	4,227,336	975,582
2026	2,786,094	322,025	1,462,488	191,125	204,375	240,000	5,206,106	3,222,340	1,217,366	277,695	34,219	3,500,035	1,251,585	4,232,216	973,890
2027	2,787,844	320,613	1,466,363	193,625	204,375	250,000	5,222,819	3,221,234	1,226,598	279,993	35,344	3,501,227	1,261,941	4,240,871	981,948
2028	2,790,469	323,863	1,458,238	190,750	204,375	260,000	5,227,694	3,218,470	1,220,986	277,151	31,488	3,495,621	1,252,475	4,252,370	975,324
2029	2,783,969	321,775	1,462,988	192,500	336,000		5,097,231	3,218,951	1,220,505	279,164	32,648	3,498,116	1,253,153	4,123,243	973,989
2030	2,788,094	324,350	1,460,363	193,750	339,000		5,105,556	3,223,135	1,219,071	276,086	33,692	3,499,221	1,252,763	4,128,880	976,676
2031	2,787,469	321,588	1,465,238	189,625	336,625		5,100,544	3,221,701	1,220,630	277,553	30,640	3,499,254	1,251,270	4,126,826	973,718
2032	2,782,969	323,488	1,461,644		338,875		4,906,975	3,219,559	1,025,054	278,487	33,438	3,498,046	1,058,492	4,126,970	780,005
2033	2,790,169	320,050	1,460,000		335,750		4,905,969	3,220,773	1,029,396	279,249	31,122	3,500,021	1,060,518	4,124,699	781,270
2034	2,788,869	321,275	1,461,338		337,250		4,908,731	3,220,257	1,029,950	279,837	33,692	3,500,094	1,063,642	4,124,927	783,805
2035	2,779,269	322,050	1,460,550		338,250		4,900,119	3,218,011	1,021,808	280,253	31,148	3,498,263	1,052,956	4,127,415	772,704
2036	2,781,169	322,375	1,457,638		338,750		4,899,931	3,218,948	1,019,858	280,495	33,490	3,499,443	1,053,348	4,127,078	772,853
2037	1,156,859	322,250	444,125		333,875		2,257,109	3,222,896	(1,621,912)	275,651	30,718	3,498,547	(1,591,194)	4,123,954	(1,866,845)
2038	1,157,519	321,675	445,738		338,500		2,263,431	3,224,768	(1,621,512)	275,721	32,832	3,500,489	(1,588,680)	4,127,832	(1,864,400)
2039	1,156,734	320,650	441,788		338,344		2,257,516	3,214,737	(1,616,215)	275,617	34,718	3,490,354	(1,581,497)	4,114,630	(1,857,114)
2040	1,154,506	324,063	442,275		338,569		2,259,413	3,222,630	(1,625,849)	280,254	31,490	3,502,884	(1,594,359)	4,134,025	(1,874,613)
2041	1,155,731	321,913	442,088		338,369		2,258,100	3,221,293	(1,623,474)	279,467	33,148	3,500,759	(1,590,326)	4,127,892	(1,869,792)
2042	1,155,306	324,200	441,225		337,744		2,258,475	3,225,563	(1,629,032)	278,336	34,578	3,503,899	(1,594,454)	4,131,265	(1,872,790)
2043	1,158,128	320,925	444,575		336,694		2,260,322	3,217,272	(1,614,568)	277,023	30,894	3,494,294	(1,583,674)	4,121,019	(1,860,697)
2044	1,154,197	322,088	442,138		335,047		2,253,469	3,216,418	(1,620,084)	275,526	32,096	3,491,944	(1,587,988)	4,116,982	(1,863,514)
2045	1,158,409		443,913		337,688		1,940,009	3,222,637	(1,620,315)	278,755	33,070	3,501,392	(1,587,245)	3,806,009	(1,866,000)
2046			444,788		334,781		779,569	3,220,836	(2,776,048)	276,710		3,497,545	(2,776,048)	3,832,326	(3,052,758)
2047					336,328		336,328	3,225,924	(3,225,924)	279,390		3,505,313	(3,225,924)	3,841,641	(3,505,313)
2048					337,219		337,219	3,217,901	(3,217,901)	276,795		3,494,696	(3,217,901)	3,831,914	(3,494,696)
2049								3,221,675	(3,221,675)	278,926		3,500,601	(3,221,675)	3,500,601	(3,500,601)
2050								3,221,973	(3,221,973)	275,783		3,497,755	(3,221,973)	3,497,755	(3,497,755)
2051								3,218,793	(3,218,793)	277,365		3,496,158	(3,218,793)	3,496,158	(3,496,158)
2052								3,221,954	(3,221,954)	278,581		3,500,534	(3,221,954)	3,500,534	(3,500,534)
2053								3,221,271	(3,221,271)	279,431		3,500,702	(3,221,271)	3,500,702	(3,500,702)
2054								3,221,654	(3,221,654)	279,915		3,501,569	(3,221,654)	3,501,569	(3,501,569)
2055								3,222,920	(3,222,920)	280,033		3,502,952	(3,222,920)	3,502,952	(3,502,952)

(1) 2020 Refunding Bonds assumed to be dated and delivered on Sept. 1, 2020. Last prior bond interest payment is due on July 1, 2020.
Proposed refinancing assumes that the 2020 Refunding includes accrued interest from Sept. 1, 2020 until April 1, 2021 principal payment.
(2) $5.5 million Rate Stabilization Fund.

+ 100 basis point increases to the Taxable Bond Refunding Scenarios

Appendix 1 - Attachment A Pro Forma Financial Net Debt Service Cash Flow

1) Taxable Bonds with Level Debt Service

Bond Year	Current Annual Debt Service						(A)							(B)	
Ending Dec. 31	2014A Total	2014B Total	2015A Total	2015B Total	2018A Total	2018B Total	Total Aggregate Debt Service Total	Total Debt Service: 2020 Refunding	Total Savings: 2020 Refunding	2020 New Money Debt Service (2)	AULI Savings	2020 New Money + Refunding DS	Total Refunding Savings	Estimated New Aggregate DS	(A)-(B) Cash Flow Savings
2021	2,789,469	320,150	1,459,238	193,375	204,375	190,000	5,156,606	3,947,222	779,505	317,017	28,096	4,264,239	807,601	4,666,022	490,585
2022	2,793,344	320,088	1,462,363	192,500	204,375	200,000	5,172,669	3,923,147	787,802	319,521	26,097	4,242,668	813,899	4,678,291	494,378
2023	2,793,969	319,800	1,463,738	191,375	204,375	210,000	5,183,256	3,913,397	791,323	316,935	28,563	4,230,331	819,886	4,680,305	502,951
2024	2,786,469	324,175	1,458,488	190,000	204,375	220,000	5,183,506	3,907,407	776,084	319,239	25,979	4,226,647	802,062	4,700,683	482,823
2025	2,790,594	323,213	1,461,488	193,250	204,375	230,000	5,202,919	3,904,496	782,266	321,309	28,400	4,225,805	810,666	4,713,561	489,357
2026	2,786,094	322,025	1,462,488	191,125	204,375	240,000	5,206,106	3,894,718	779,315	318,235	25,816	4,212,954	805,131	4,719,211	486,895
2027	2,787,844	320,613	1,466,363	193,625	204,375	250,000	5,222,819	3,888,539	786,515	320,054	28,166	4,208,592	814,681	4,728,191	494,627
2028	2,790,469	323,863	1,458,238	190,750	204,375	260,000	5,227,694	3,880,249	779,326	316,717	25,510	4,196,966	804,836	4,739,575	488,119
2029	2,783,969	321,775	1,462,988	192,500	336,000		5,097,231	3,874,722	777,749	318,222	27,845	4,192,944	805,594	4,609,860	487,372
2030	2,788,094	324,350	1,460,363	193,750	339,000		5,105,556	3,872,340	775,777	319,519	25,109	4,191,859	800,886	4,624,189	481,367
2031	2,787,469	321,588	1,465,238	189,625	336,625		5,100,544	3,858,891	782,247	320,274	27,703	4,179,165	809,949	4,610,868	489,676
2032	2,782,969	323,488	1,461,644		338,875		4,906,975	3,854,129	582,187	320,479	25,615	4,174,608	607,801	4,619,653	287,322
2033	2,790,169	320,050	1,460,000		335,750		4,905,969	3,846,916	587,852	320,462	28,413	4,167,377	616,264	4,610,166	295,803
2034	2,788,869	321,275	1,461,338		337,250		4,908,731	3,837,252	590,449	320,221	26,097	4,157,473	616,545	4,612,407	296,324
2035	2,779,269	322,050	1,460,550		338,250		4,900,119	3,834,913	575,297	319,758	23,781	4,154,670	599,077	4,620,799	279,320
2036	2,781,169	322,375	1,457,638		338,750		4,899,931	3,824,788	577,305	319,071	26,351	4,143,859	603,655	4,615,347	284,584
2037	1,156,859	322,250	444,125		333,875		2,257,109	3,811,993	(2,054,826)	318,162	28,693	4,130,154	(2,026,133)	4,601,404	(2,344,294)
2038	1,157,519	321,675	445,738		338,500		2,263,431	3,811,189	(2,058,854)	317,029	25,921	4,128,218	(2,032,934)	4,613,394	(2,349,963)
2039	1,156,734	320,650	441,788		338,344		2,257,516	3,802,155	(2,061,658)	320,562	28,035	4,122,717	(2,033,623)	4,611,701	(2,354,185)
2040	1,154,506	324,063	442,275		338,569		2,259,413	3,799,778	(2,068,126)	318,761	25,035	4,118,538	(2,043,091)	4,621,264	(2,361,852)
2041	1,155,731	321,913	442,088		338,369		2,258,100	3,787,072	(2,061,486)	316,576	26,921	4,103,648	(2,034,566)	4,609,242	(2,351,142)
2042	1,155,306	324,200	441,225		337,744		2,258,475	3,778,838	(2,061,644)	318,887	28,579	4,097,725	(2,033,065)	4,610,427	(2,351,952)
2043	1,158,128	320,925	444,575		336,694		2,260,322	3,776,407	(2,060,145)	320,732	25,123	4,097,139	(2,035,023)	4,616,077	(2,355,755)
2044	1,154,197	322,088	442,138		335,047		2,253,469	3,769,547	(2,066,758)	317,228	26,553	4,086,775	(2,040,205)	4,610,902	(2,357,433)
2045	1,158,409		443,913		337,688		1,940,009	3,758,255	(2,056,583)	318,374	27,755	4,076,629	(2,028,828)	4,287,211	(2,347,201)
2046			444,788		334,781		779,569	3,688,780	(3,244,194)	319,054		4,007,834	(3,244,194)	4,342,816	(3,563,247)
2047					336,328		336,328	3,690,659	(3,690,860)	319,268		4,009,926	(3,690,860)	4,346,456	(4,010,127)
2048					337,219		337,219	3,687,178	(3,687,379)	319,016		4,006,194	(3,687,379)	4,343,614	(4,006,395)
2049								3,688,106	(3,688,307)	318,298		4,006,403	(3,688,307)	4,006,604	(4,006,604)
2050								3,688,092	(3,688,293)	317,114		4,005,205	(3,688,293)	4,005,406	(4,005,406)
2051								3,682,020	(3,682,221)	320,347		4,002,367	(3,682,221)	4,002,568	(4,002,568)
2052								3,689,424	(3,689,625)	317,998		4,007,422	(3,689,625)	4,007,623	(4,007,623)
2053								3,689,838	(3,690,039)	320,067		4,009,904	(3,690,039)	4,010,105	(4,010,105)
2054								3,688,145	(3,688,346)	321,436		4,009,581	(3,688,346)	4,009,782	(4,009,782)
2055								3,688,997	(3,689,198)	317,223		4,006,220	(3,689,198)	4,006,421	(4,006,421)

(1) 2020 Refunding Bonds assumed to be dated and delivered on Sept. 1, 2020. Last prior bond interest payment is due on July 1, 2020.
Proposed refinancing assumes that the 2020 Refunding includes accrued interest from Sept. 1, 2020 until April 1, 2021 principal payment.
(2) $5.5 million Rate Stabilization Fund.

PENNICHUCK®

CORPORATE SECRETARY'S CERTIFICATE

PENNICHUCK WATER WORKS, INC.

I, Suzanne L. Ansara, do hereby certify that I am the duly elected Corporate Secretary of Pennichuck Water Works, Inc. (the "Company"), a New Hampshire corporation, and that I am authorized to execute and deliver this Certificate on behalf of the Company. In that capacity, I do hereby further certify that:

1. The following resolution was adopted by the Board of Directors of the Company on February 28, 2020; and such resolution has not been altered, amended or repealed, and is in full force and effect, as of the date hereof:

   Resolved: that management is hereby authorized to proceed with the following process and approvals required to complete the refinance of the 2014 Series A and 2015 Series A&B bonded debt, the refill of the rate stabilization fund, and the refinance of the AULI Note Payable:

   (1) obtain New Hampshire Business Finance Authority (NHBFA) approval to issue taxable or tax-exempt bonds sufficient to fund the debt restructuring;

   (2) file a financing petition with the New Hampshire Public Utilities Commission to seek approval to complete the financing activity;

   (3) file a shareholder approval request with the City of Nashua to seek approval to complete the financing activity;

   (4) file a joint approval request with the NHBFA to the State of New Hampshire Governor and Council, approving the funding of the taxable or tax-exempt bonds through the NHBFA; and

   (5) complete the entire bond issuance and documentation process with the investment bankers and respective counsels.

In Witness Whereof, I have hereunto set my hand this 21st day of April, 2020.

Suzanne L. Ansara
Corporate Secretary

PENNICHUCK®

PENNICHUCK CORPORATION

CORPORATE SECRETARY'S CERTIFICATE

I, Suzanne L. Ansara, do hereby certify that I am the duly elected Corporate Secretary of Pennichuck Corporation (the "Company"), a New Hampshire corporation, and that I am authorized to execute and deliver this Certificate on behalf of the Company. In that capacity, I do hereby further certify that:

1. The following is a true and correct excerpt from the minutes of the Pennichuck Corporation Board of Directors meeting held on February 28, 2020:

   "Pennichuck Water Works, Inc. - Debt Restructuring Plan

   L. Goodhue reported that management is recommending that Pennichuck Water Works issue taxable or tax-exempt bonds of up to $75 million to fund: (a) the refinancing of the currently outstanding balances of the 2014 Series A and 2015 Series A&B bonds; (b) the refinancing of the $2.4 million note payable to American United Life Insurance which has a current interest rate of 7.4%; (c) the financing of $5.5 million to refill the Rate Stabilization Fund; and (d) the cost of issuance for the bonds. This financing would eliminate the current bullet maturity obligation of the AULI note and replace with a lower interest rate; refill the Rate Stabilization Fund to its imprest level; and provide necessary cash flow savings to establish the proposed Material Operating Expense Supplement (MOES) in the current rate case. L. Goodhue answered several questions regarding the debt restructuring plan from the Board members. After discussion, the Board gave their approval to proceed. It was agreed by the Board that this matter will be voted on by the Pennichuck Water Works Board of Directors at their meeting later today."

In Witness Whereof, I have hereunto set my hand this 21st day of April, 2020.

Suzanne L. Ansara
Corporate Secretary

From: James Key-Wallace <jameskw@nhbfa.com>
Sent: Tuesday, June 23, 2020 12:58 PM
To: Goodhue, Larry <larry.goodhue@PENNICHUCK.com>
Subject: [EXTERNAL] Confirmation of BFA Board Approval

Good afternoon Larry,

This email is to confirm that on May 18th, 2020 the BFA board of directors unanimously approved the issuance of up to $75,000,000 in bonds for Pennichuck. As always, final issuance is contingent on approval by the NH Governor and Council (G&C).

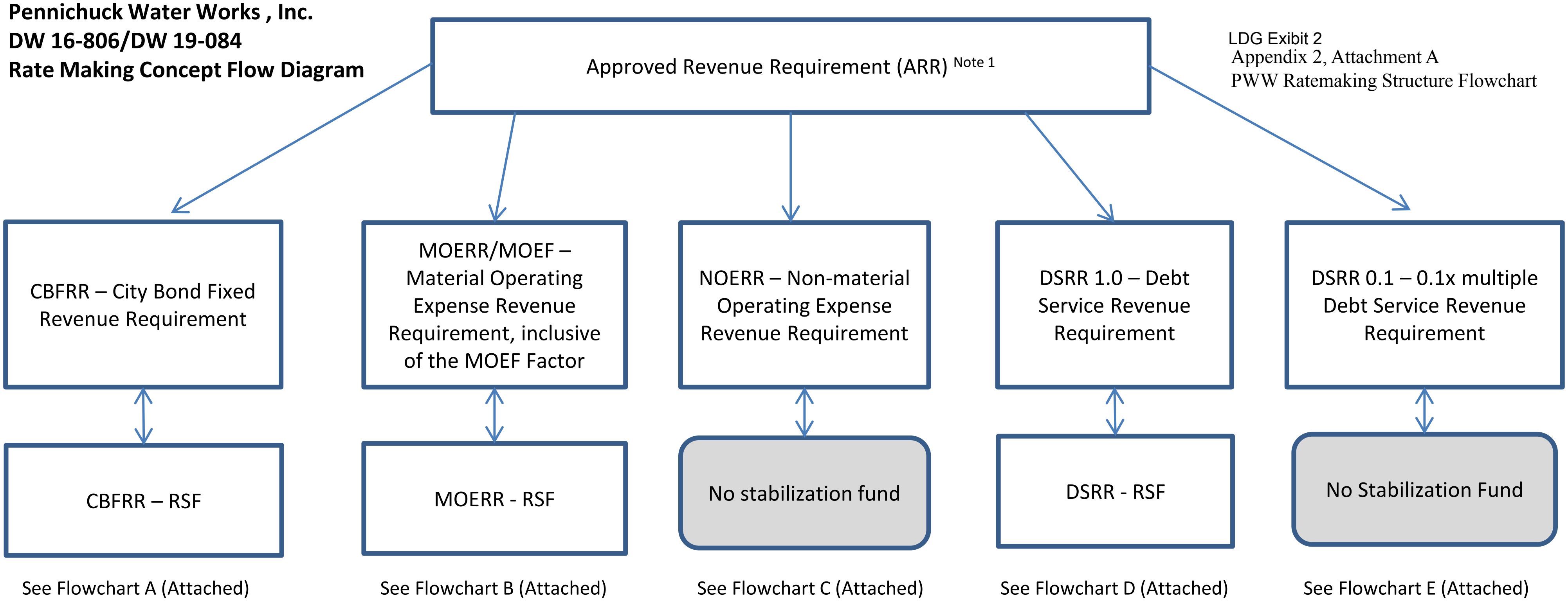
The G&C meeting to provide final approval for this bond issuance is on June 24th, 2020 at 10am, and we anticipate an approval. The G&C has always been supportive of the BFA's bond issuances, especially for Pennichuck.

Feel free to reach out if you need any additional information and I'd be happy to provide it.

Regards,

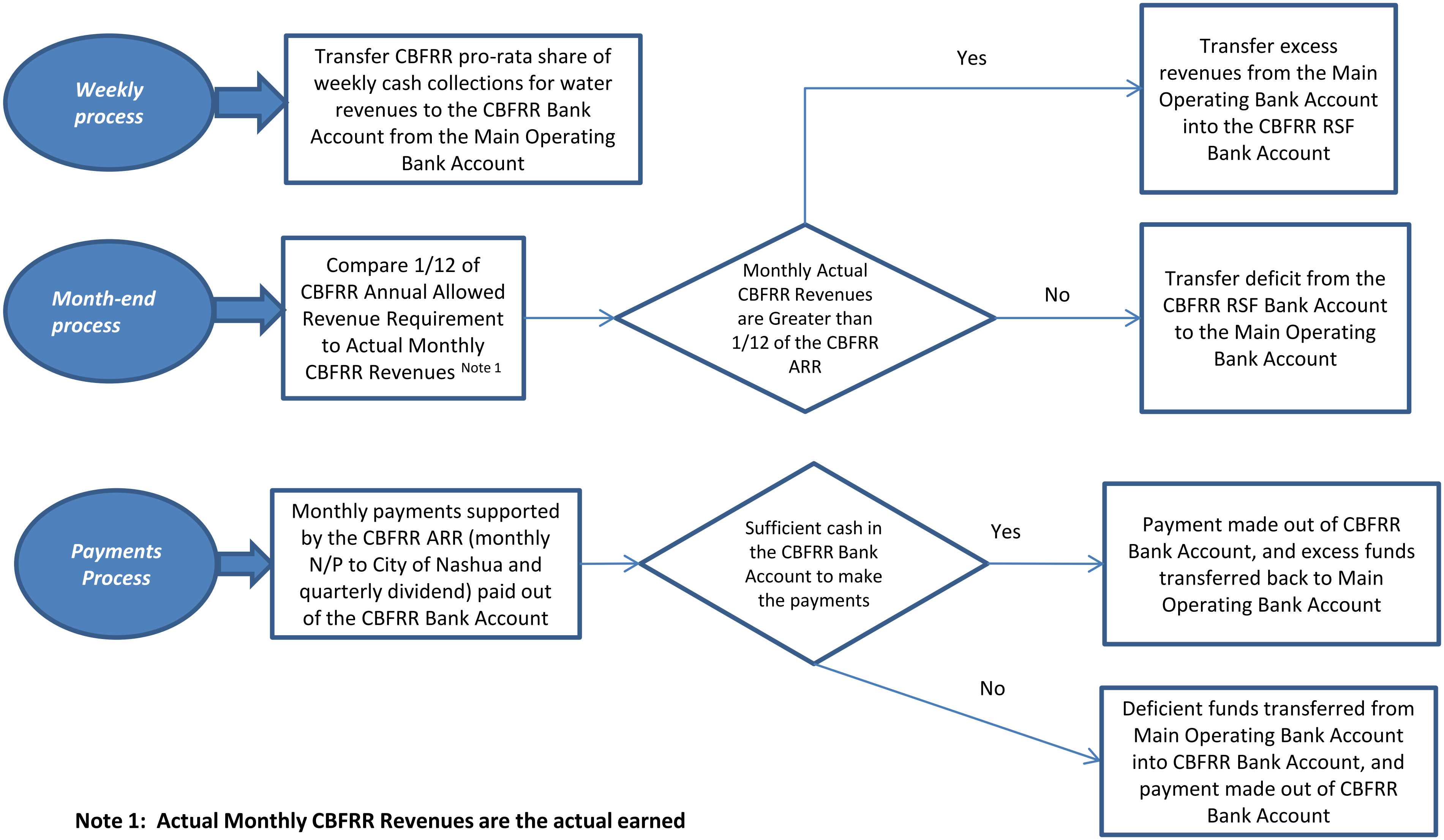
James Key-Wallace
Executive Director
NH Business Finance Authority
2 Pillsbury Street, Suite 201
Concord, NH 03301
603-415-0191
jameskw@nhbfa.com

Pennichuck Water Works , Inc.
DW 16-806/DW 19-084
Rate Making Concept Flow Diagram



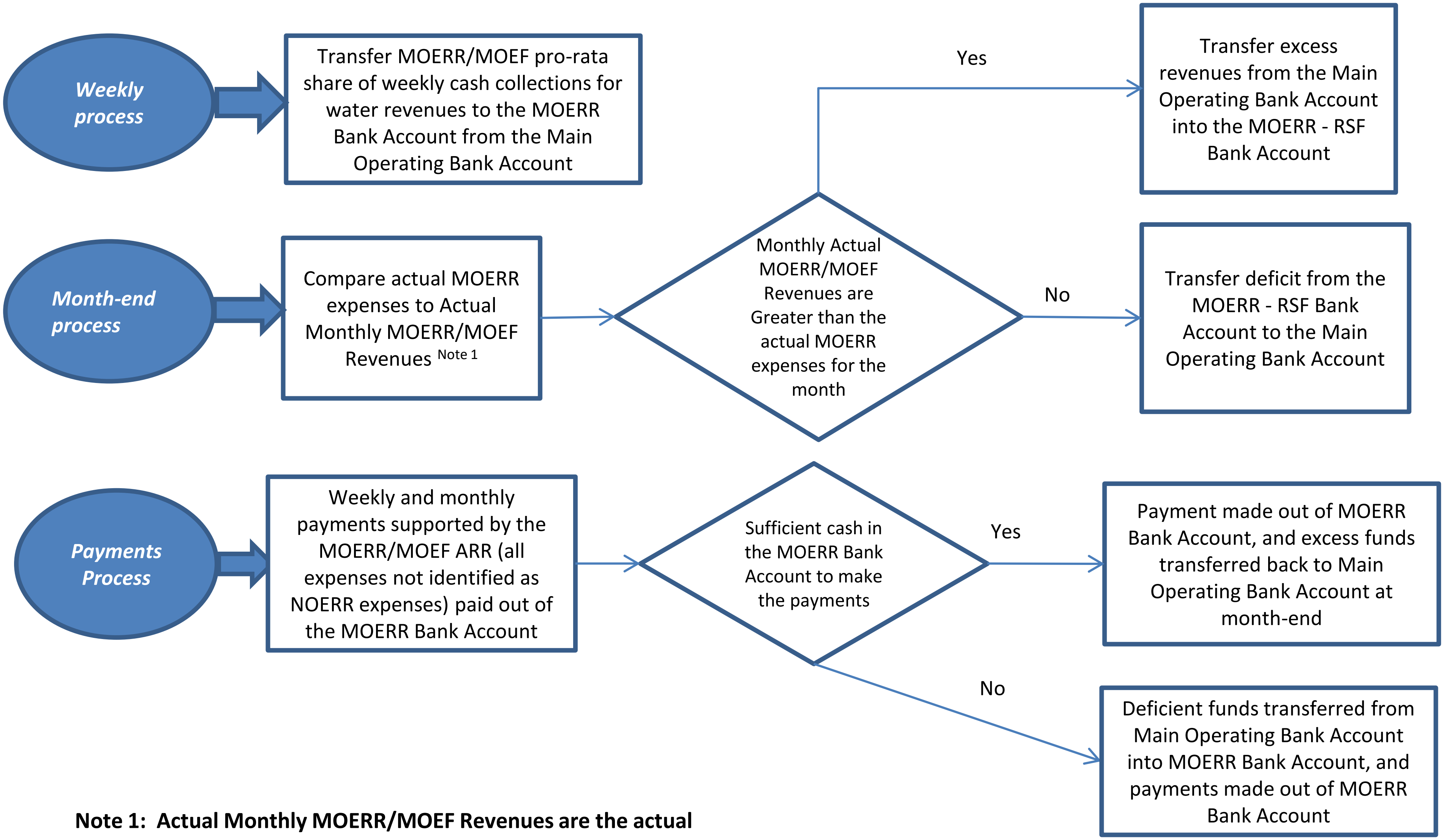
Note 1 – The Approved Revenue Requirement equals the annual revenue requirement established at the most recent rate case, adjusted annually on or about April 1st (effective date for inclusion/recoupment of the most recently approved annual QCPAC Surcharge), and "trued up" to the actual approved amounts as of the issuance of the QCPAC surcharge increase order. This ARR is divided amongst the component Revenue Requirement items, inclusive of the annual QCPAC increase allocated amounts, into the identified CBFRR, MOERR/MOEF, NOERR, DSRR-1.0 and DSRR 0.1 revenue "buckets."

Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Rate Making Concept Flow Diagram - Flowchart A



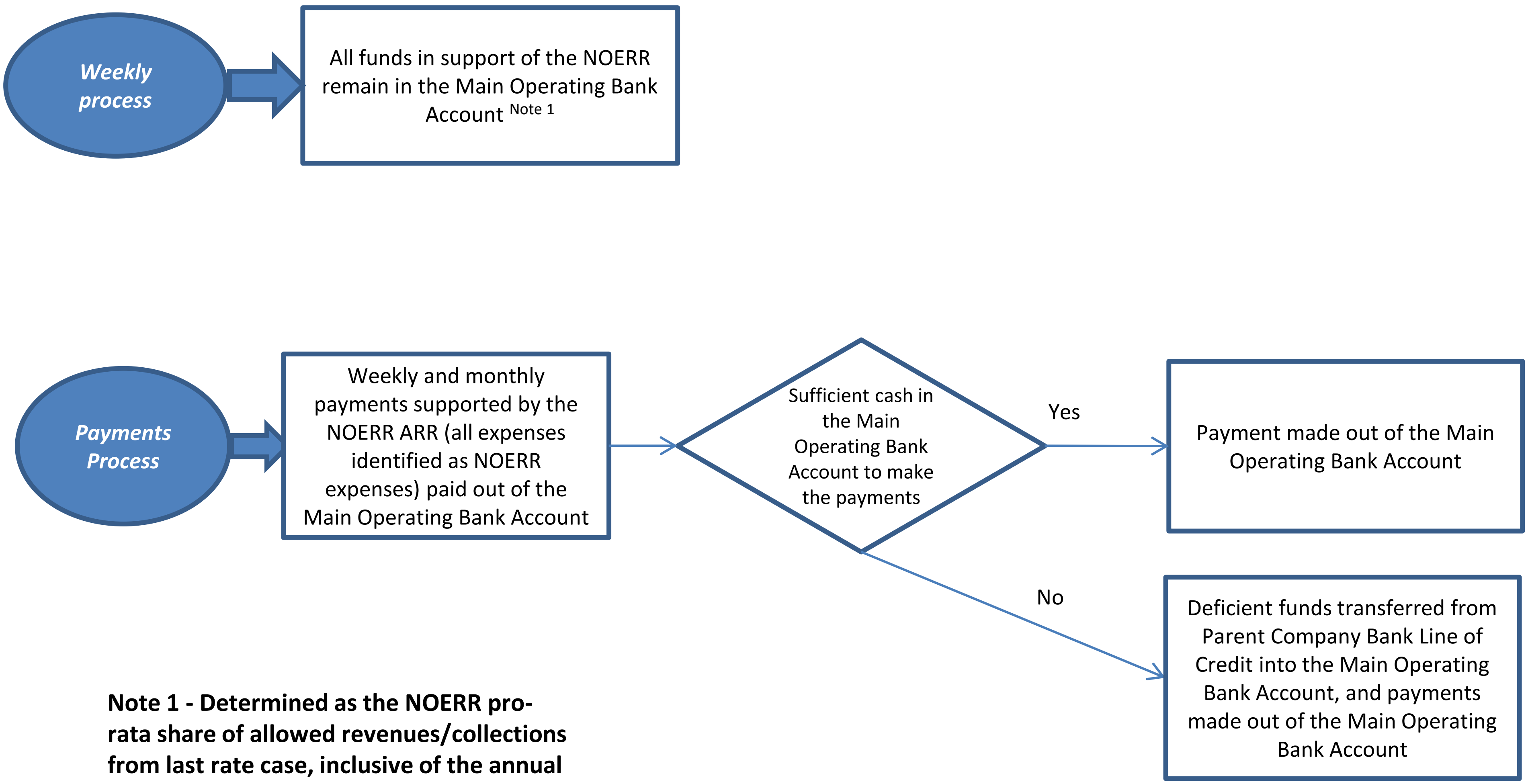
Note 1: Actual Monthly CBFRR Revenues are the actual earned water revenues in the month multiplied times the pro-rata percentage of revenues allocated to the CBFRR, per the last rate case, inclusive of the annual QCPAC increase.

Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Rate Making Concept Flow Diagram - Flowchart B



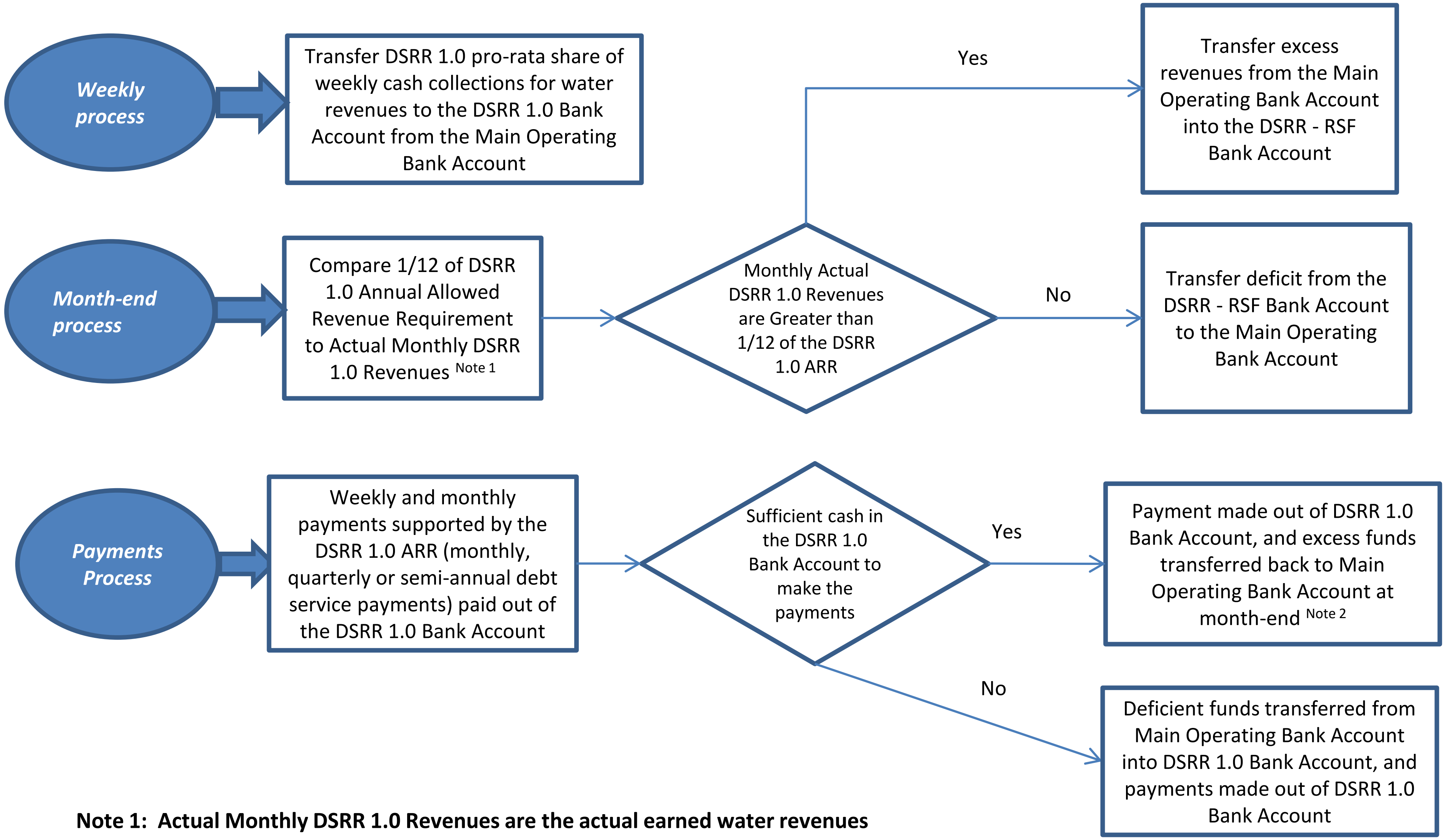
Note 1: Actual Monthly MOERR/MOEF Revenues are the actual earned water revenues in the month multiplied times the pro-rata percentage of revenues allocated to the MOERR/MOEF, per the last rate case, inclusive of the annual QCPAC increase.

Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Rate Making Concept Flow Diagram - Flowchart C



Note 1 - Determined as the NOERR pro-rata share of allowed revenues/collections from last rate case, inclusive of the annual QCPAC increase.

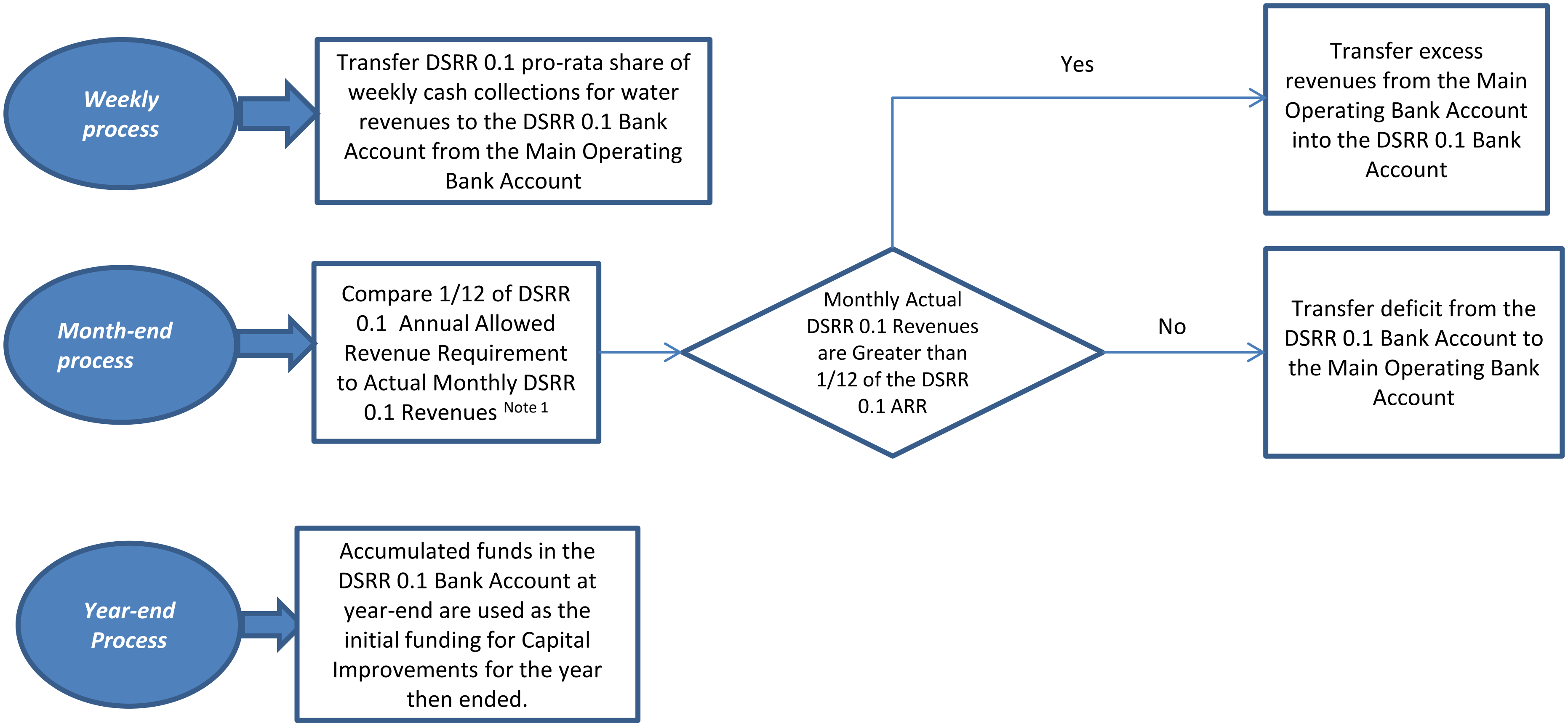
Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Rate Making Concept Flow Diagram - Flowchart D



Note 1: Actual Monthly DSRR 1.0 Revenues are the actual earned water revenues in the month multiplied times the pro-rata percentage of revenues allocated to the DSRR 1.0, per the last rate case, inclusive of the annual QCPAC increase.

Note 2: Adequacy of funds in the DSRR Bank Account each month will be determined as 100% of monthly payment obligations, 33 1/3% of quarterly payment obligations and 1/12 of the annual debt service for semi-annual payment obligations.

Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Rate Making Concept Flow Diagram - Flowchart E



Note 1: Actual Monthly DSRR 0.1 Revenues are the actual earned water revenues in the month multiplied times the pro-rata percentage of revenues allocated to the DSRR 0.1, per the last rate case, inclusive of the annual QCPAC increase.

Pennichuck Water Works , Inc. - DW 16-806/DW 19-084
Definition of Terms

- **Approved Revenue Requirement**: equals the annual revenue requirement established at the most recent rate case, adjusted annually on or about April 1st and "trued up" to the actual approved amounts as of the issuance of the QCPAC annual surcharge increase order (the QCPAC shall become eligible for annual recoupment from the date for which bonded debt or other financing that is incurred with respect to the specific eligible projects is issued or consummated, anticipated to be approximately April 1 of each year). This ARR is divided amongst the component Revenue Requirement items, inclusive of the annual QCPAC surcharge increase allocated amounts, into the identified CBFRR, OERR and DSRR revenue "buckets."
- **Actual Revenues and Actual Expenses:** In all cases with regards to the flowcharts and processes included on Flowcharts A thru E, Actual Revenues and Actual Expenses are on a GAAP basis, inclusive of accrued amounts.
- **CBFRR RSF**: Same as the former RSF as authorized and described in DW 11-026 and reaffirmed in DW 16-806. Allows for the maintenance of stable water utility rates, while providing a mechanism to ensure the Company's ability to meet its obligations under the promissory note to the City.
- **MOERR RSF**: Funds used to provide cash flow for allowable expenses, defined as PWW's Operation and Maintenance Expenses (less those in the NOERR), Property Tax Expense, Payroll Tax Expense, and Amortization Expense.
- **MOEF and MOERR/MOEF:** The MOEF is a factor embedded in the calculation of overall allowed revenues allocated to the MOERR portion of those revenues from the Company's last rate case. This factor is included in the pro-rata allocation of allowed revenues by multiplying the allowed MOERR portion of the OERR revenues by a factor inclusive of the allowed MOEF. It calculated as:
  - (MOERR allowed revenues) x (1+MOEF) = MOERR/MOEF allowed revenues.
- **NOERR**: Funds expenses that are potentially imprudent expenditures within the context of a rate proceeding. The categorization of an expense item in the NOERR does not preclude PWW's recovery of such in rates, as long as that expense item is found to be prudently incurred within the pro forma test year. They may not, however, be included in any use of or replenishment from the MOERR RSF.
- **DSRR-1.0 RSF**: used to support the payments related to the principal and interest obligations for PWW, in existence as of the most recent rate case test year. The establishment of this DSRR-1.0 RSF bucket is to allow the collection of revenues sufficient to pay the principal and interest of PWW's debt and to satisfy the debt service coverage ratio requirements of PWW's bond financings and Pennichuck Corporation's covenant requirements of its line of credit, which is used by Pennichuck Corporation and its subsidiaries as a "back stop" to short-term working capital needs.
- **DSRR-0.1**: The intended purposes for the establishment of the DSRR-0.1 are 1) to allow for the collection of revenues sufficient to satisfy the debt service coverage ratio requirements of PWW's bond financings and Pennichuck Corporation's covenant requirements for its line of credit, which is used by Pennichuck Corporation and its subsidiaries as a "back stop" for short-term capital needs; and 2) to allow PWW to collect revenues over-and-above its actual debt service in order to comply with cash flow coverage requirements which are typical for such financings as well as to meet obligations on new debt incurred between rate filings as supported by the annual QCPAC surcharge.

LDG Exibit 2

DLW Exhibit 1

Appendix 2 - Attachment B MOEF Financial Model

Rate Stabilization Fund Calculations
Revised 1/24/2020 per Staff Tech DR2's
Resubmitted 2/7/2020 per Staff 3-1
Adjusted per Staff 4-1 on 2/21/2020
Revised 4/1/2020 to reflect Staff DR 4's
Revised 4/9/2020 to reflect Staff Tech 4's
3.67 TIC
Revised 5/20/2020 to refflect tech session and correction of NOERR expenses; Rev 5/26/20

PWW Proforma 5 Year Average 2018 Test Year with MOES

Pro forma Revenue Requirement[1] - **$ 35,661,132**
Operating Expense Contingency - **9.50% applies against Material Operating Expenses**

Annual Operating Expense increases @ 3.00%

	CBFRR	Material Operating Expense Revenue Requirement (MOERR)	Operating Expense Revenue Requirment (NOERR)[6]	1.0 Debt Service Revenue Requirement (1.0 DSRR)[1]	0.1 Debt Service Reveue Requirement (0.1 DSRR)	Total RSF Funds Required	Available RSF funds on 12/31/2019	
Revenue Requirement[2] -	$ 7,729,032	$ 20,741,272	$ 555,346	$ 6,032,257	$ 603,226		$ (1,613,608)	
Percentage of Revenues -	21.67%	58.16%	1.56%	16.92%	1.69%			
1 Year coverage -	$ 148,602	$ 1,016,147		$ 115,979				
2 Year coverage -	$ 297,204	$ 2,669,995		$ 231,958				
3 Years coverage -	$ 445,806	$ 4,980,674		$ 347,937	$ -			
Calculated Rate Stabilization Fund by Revenue Category for 1 year[3,4,9] -	$ 160,000	$ 1,120,000		$ 130,000		$ 1,410,000		
Calculated Rate Stabilization Fund by Revenue Category for 2 year[3,4,9] -	$ 330,000	$ 2,940,000		$ 260,000		$ 3,530,000		
Calculated Rate Stabilization Fund by Revenue Category for 3 years[3,4,9] -	$ 490,000	$ 5,480,000	No Stabilization Fund	$ 380,000	No Stabilization Fund	$ 6,350,000		
Requested Rate Stabiliation Fund levels[8] -	$ 680,000	$ 2,850,000		$ 390,000		$ 3,920,000	$ 5,533,608	Required Catch up As a "one time" borrowed amount to refill the RSF funds awating implementation of the MOES
Based on largest variance from five year ave of -	3.40%							

Revenue Type	2013 PWW Billed Revenue	2014 PWW Billed Revenue	2015 PWW Billed Revenue	2017 PWW Billed Revenue	2018 PWW Billed Revenue
Total Volumetric Charges, includes Unbilled water sales, Unbilled/and Billed Recoupment and abatements	$ 15,093,982	$ 15,340,557	$ 16,357,423	$ 15,457,194	$ 17,516,995
Total Meter Charge (fixed) includes fixed portion of special contracts	$ 8,162,854	$ 8,243,956	$ 8,429,316	$ 8,766,739	$ 9,437,913
WICA/QCPAC revenues	$ -	$ 109,727	$ 367,548	$ 705,661	$ 362,159
Total Private Fire Protection Charges (fixed)	$ 1,027,245	$ 1,039,276	$ 1,058,281	$ 1,089,205	$ 1,210,960
Total Municipal Fire Proection Charges (fixed)	$ 3,047,037	$ 3,060,346	$ 3,075,100	$ 3,116,640	$ 3,442,774
Total Billed Revenue	$ 27,331,118	$ 27,793,862	$ 29,287,668	$ 29,135,439	$ 31,970,800
% of Revenues that are variable	55.2%	55.4%	56.6%	54.4%	55.4%
% of Revenues that are fixed	44.8%	44.6%	43.4%	45.6%	44.6%

Calculation of MOER RSF

	Increases Over 2019	Revenue Shortfall
2020 -	$ 619,269	$ 396,878
2021 -	$ 1,257,026	$ 396,821
2022 -	$ 1,913,917	$ 396,762
	$ 3,790,212	$ 1,190,462
	Totals -	$ 4,980,674

Maximum percentage of revenues that were variable during the previous 5 years - 56.56%

Expense Type	2013 PWW Actual Variable Expenses	2014 PWW Actual Variable Expenses	2015 PWW Actual Variable Expenses	2017 PWW Actual Variable Expenses	2018 PWW Actual Variable Expenses
Purchased Water	$ 415,331	$ 393,060	$ 462,177	$ 437,664	$ 472,407
Electric	$ 873,619	$ 898,211	$ 1,164,461	$ 1,053,878	$ 1,152,305
Chemicals	$ 659,914	$ 696,650	$ 668,919	$ 765,438	$ 908,982
Sludge Disposal	$ 246,601	$ 303,057	$ 316,654	$ 385,873	$ 378,140
Total Variable Costs	$ 2,195,465	$ 2,290,978	$ 2,612,211	$ 2,642,853	$ 2,911,834
Variable Expenses as a Percent of Total Revenues	8.0%	8.2%	8.9%	9.1%	9.1%

	2013 PWW Actual Operating Expenses[10]	2014 PWW Actual Operating Expenses[10]	2015 PWW Actual Operating Expenses[10]	2017 PWW Actual Operating Expenses[10]	2018 PWW Actual Operating Expenses[10]
Production Expenses	$ 3,866,154	$ 4,099,167	$ 4,515,441	$ 4,571,844	$ 5,074,509
T&D expenses	$ 1,547,952	$ 1,868,516	$ 1,858,477	$ 2,168,076	$ 2,848,339
Engineering Expenses	$ 833,292	$ 964,081	$ 1,065,646	$ 1,169,359	$ 1,287,747
Customer Acct & Collection Expenses	$ 436,393	$ 442,289	$ 463,937	$ 447,889	$ 489,789
Admin and General Expenses	$ 6,677,427	$ 6,000,562	$ 6,364,880	$ 7,303,584	$ 7,580,371
Inter Div Mgt Fee Expense	$ (2,254,305)	$ (2,270,498)	$ (2,378,932)	$ (3,321,124)	$ (3,288,063)
Amortization Expense[11]	$ 48,059	$ 140,811	$ 167,776	$ 145,441	$ 134,666
Property Tax Expense Payroll Tax Expense	$ 4,123,297	$ 4,468,936	$ 4,617,857	$ 5,210,697	$ 4,438,775 $ 698,087
Cash Tax Expense[12]	$ 99,000	$ 100,000	$ 101,000	$ 103,000	$ 103,249
Total Material Operating Expense	$ 15,377,269	$ 15,813,864	$ 16,776,082	$ 17,798,766	$ 19,367,469
Percent increase in operationg expenses over the prior year		2.84%	6.08%	3.05%	8.81%
				Total increase over 5 years -	25.95%
				Ave. increase per year (inclusive of compounding) -	4.72%

	2013 Actual CCF's sold by PWW	2014 Actual CCF's sold by PWW	2015 Actual CCF's sold by PWW	2017 Actual CCF's sold by PWW	2018 Actual CCF's sold by PWW
Annual Metered Sales (CCF)	4,948,775	4,988,184	5,349,169	5,056,592	5,242,264
Percentage Variance between Current and High Consumption Year	-8.09%	-7.24%	0.00%	-5.79%	-2.04%

LDG Exibit 2

Appendix 2 - Attachment B MOEF Financial Model

Average Consumption (CCF) over the past five years (replacing 2016 with 2013)	5,116,997				
Variance between current and 5 Yr Ave Consumption	-3.40%	-2.58%	4.34%	-1.19%	2.39%

Largest percentage reduction in volumetric sales at **PWW of** 3.40% over the past five years from the five year average of volumetric sales excluding 2016, including 2013

Results in a Revenue loss of based on 5 year average sales less 2016, including 2013	$	636,621	based on current permanent rate of $ 3.66 per CCF
Results in an Operating Expense reduction of	$	98,981	based on 2018 variable operating expenses
Results in an Operating Income reduction of	$	537,640	

Notes:
1. Based on Debt Service Multiplier of 1.10 per Sch A of 1604.06 schedules
2. Revenue requirements per Sch A Perm-Modified of 1604.06 schedules
3. Requested Rate Stabilization fund for Operating Expense and P & I Coverage each have a contingency of 10% safety factor
4. PWW share of the $5,000,000 RSF for distribution to the RSF, MOERSF and the P&IRSF is[5] 78.33% based on % of PWW revenues (2012 Case) to % of all three regulated utilities revenues (2012 Cases) or $ 3,920,000
5. Calculation of RSF Pecentage based on Revenue requirements from DW13-126, 13-128 and 13-130

PWW Revenue Requirment -	$	27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -	$	6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -	$	745,186	per DW13-128 Settlement Agreement
Total Utility Revenue Requirement -	$	35,347,661	

6. For Calculation of Operating Expense Requirement see Exhibit 1.1
7. Inclusive of pro forma to Hudson and Pennichuck East Usage due to the PWW-PEU interconnect - See 1604.06 Schedule 1C
8. Request rate stabilization fund levels based on multiple years of coverage for the MOERR and 1.0 DSRR RSF, and to re-establish all RSF funds to their imprest levels as determined and approved under DW 16-806.
9. WICA/QCPAC revenues are divided between variable and fixed revenues based on the ratio between those revenues without the WICA/QCPAC Revenues per year as follows

Year	Fixed	Variable
2013	44.8%	55.2%
2014	44.6%	55.4%
2015	43.4%	56.6%
2017	45.6%	54.4%
2018	44.6%	55.4%

10. Actual year auditted expenses, including non material operating expenses
11. Amortization expense for 2013, 2014, 2015 and 2017 as provided by NHPUC Staff
12. Cash tax expenses is estimated for 2013, 2014, 2015 and 2017

MOERR RSF Balance Analysis - Increased operating expenses only

Auditted	12/31/2017 MOERR RSF Balance	$	2,620,152		
Auditted	2018 MOERR Revenues	$	16,699,145		
Auditted	2018 MOERR Expenses	$	18,759,594		
Auditted	12/31/2018 MOERR RSF Balance	$	559,703		
Based on unauditted PWW 2019 Year End Revenues	2019 MOERR Revenues	$	16,360,684		
Based on unauditted PWW 2019 Year End Expenses	2019 MOERR Expenses	$	20,293,262		
Based on unauditted PWW 2019 Year End Revenues and Expenses	12/31/2019 MOERR RSF Balance	$	(3,372,875)		
Amount Subject to Current Rate Case Order	Replenish MOERR RSF	$	2,850,000	to desired value	
Based on current Rate Case filing schedules with full year of approved MOERR per Cell F13 above per 1604.04 Sch A. This $$ amount is less the NOERR and multiplied by the proposed MOERR Contingency Factor plus 75% of property taxes associated with taxable 2019 Capex	2020 MOERR Revenues	$	21,050,287	Assumes full year at requested 19-084 rates plus recoupment to 9 months of 2019 QCPAC @	3.83%
MOES requested in DW19-084 plus operating expense increase of 3% in 2020 plus increase in 2020 property taxes associated with 2019 QCP's	2020 Material Operating Expenses	$	20,494,081		
	12/31/2020 MOERR RSF Balance	$	3,406,206		
Based on current Rate Case filing MOERR per Cell F13 above. This $$ amount plus 25% of property taxes associated with taxable 2019 assets plus 75% of property taxes associated with taxable 2019 and 2020 Capex	2021 MOERR Revenues	$	21,332,446	Assumes 3 months of 2019 QCPAC plus 9 months of 2020 QCPAC @	6.46%
MOES requested in DW19-084 plus operating expense increases of 3% per year for 2020 and 2021 plus property taxes on 2019 and 2020 QCP's	2021 Material Operating Expenses	$	21,335,416		
	12/31/2021 MOERR RSF Balance	$	3,403,236		
Based on current Rate Case filing MOERR per Cell F13 above. This $$ amount plus 25% of property taxes associated with taxable 2019 and 2020 assets plus 75% of property taxes associated with taxable 2019, 2020 and 2021 Capex	2022 MOERR Revenues	$	21,602,875	Assumes 3 months of 2020 QCPAC plus 9 months of 2021 QCPAC @	10.13%
MOES requested in DW19-084 plus operating expense increases of 3% per year for 2020, 2021 and 2022 plus property taxes on 2019, 2020 and 2021 QCP's	2022 Material Operating Expenses	$	22,236,898		
	12/31/2022 MOERR RSF Balance	$	2,769,212		
Based on 2022 MOE times allowed MOES factor plus 9 months of 2022 property taxes related 2021 QCP's	2023 MOERR Revenues	$	24,598,183	Assumes full year at requested 22-xxx rates plus recoupment to 9 months of 2022 QCPAC	3%
MOES requested in DW22-xx plus operating expense increase of 3% in 2023 plus increase in 2023 property taxes associated with 2022 QCP's	2023 Material Operating Expenses	$	23,235,712		
	12/31/2023 MOERR RSF Balance	$	4,131,684		

Pennichuck Water Works, Inc.
Accounts Excluded From MOERR
DW 19-084
Revised per Staff DR 2-37; Rev 5/26/20

LDG Exibit 2

Appendix 2 - Attachment B MOEF Financial Model

(1)

Test Year

															2018 Totals
921002	SENIOR MANAGEMENT VEHICLES	165.33	-	154.01	199.91	1,462.15	563.18	136.13	202.31	-	259.43	231.32	-	**3,373.77**	3,373.77
921003	SENIOR MGMT - FUEL PURCHASED	268.27	290.78	581.48	292.31	-	29.40	460.43	518.38	478.78	401.56	412.62	352.66	**4,086.67**	4,086.67
921004	SENIOR MGMT-VEH REGISTRATION	-	-	-	-	-	-	-	-	990.60	-	-	-	**990.60**	990.60
923000	OUTSIDE SERVICES	26,089.44	52,203.05	18,573.97	35,287.99	39,854.29	44,858.22	23,959.26	20,603.55	22,444.81	47,134.61	24,067.78	30,282.72	**385,359.69**	385,359.69
926001	OFFICER'S LIFE INSURANCE	386.19	386.19	386.19	386.19	386.19	386.19	386.19	386.19	2,055.19	386.19	386.19	386.19	**6,303.28**	6,303.28
926500	MISC EMPLOYEE BENEFITS	4,364.64	1,732.33	1,830.57	1,310.04	365.44	2,627.19	720.54	(7,570.39)	1,452.24	1,883.76	2,924.33	(2,881.77)	**8,758.92**	8,758.92
926501	MISC EMPLOYEE BENEFITS-WELLNESS	-	-	630.70	(1,105.00)	6,715.00	(1,056.52)	(282.08)	(2,770.73)	853.41	(1,109.16)	10.00	1,485.76	**3,371.38**	3,371.38
926502	MISC EMPLOYEE BENEFITS-ACTIVITIES	-	-	-	-	-	-	-	948.43	354.49	3,102.63	2,500.00	4,768.88	**11,674.43**	11,674.43
926505	EMPLOYEE RELATIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
926600	TUITION REIMBURSEMENTS	6,510.00	-	2,972.84	-	4,088.37	976.85	3,801.00	-	99.70	5,642.87	1,476.90	6,677.77	**32,246.30**	32,246.30
926610	TRAINING EDUCATIONAL SEMINARS	1,180.00	1,305.00	-	4,016.34	708.00	2,754.50	2,383.98	280.00	11,188.41	19,877.43	606.45	6,667.33	**50,967.44**	50,967.44
930100	MEETINGS & CONVENTIONS	915.00	5,299.70	5,343.92	5,644.97	526.53	273.33	908.96	33.33	13,381.78	659.00	1,496.66	841.61	**35,324.79**	35,324.79
930101	MEMBERSHIPS	3,833.91	3,698.91	139.98	4,262.29	3,829.66	3,857.62	2,463.42	3,159.92	2,524.71	2,042.72	3,308.76	2,467.63	**35,589.53**	35,589.53
930200	PUBLIC RELATIONS	-	429.65	913.96	2,681.64	5,989.22	13,011.91	887.53	535.24	-	443.57	372.60	359.64	**25,624.96**	25,624.96
930300	MEALS	390.09	610.33	398.83	282.21	411.20	147.01	291.72	396.51	122.94	742.99	382.58	26.93	**4,203.34**	4,203.34
930410	CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
														Total of Non RSF backed O&M Expenses -	607,875.10
														Adjustment to NOERR expenses per Staff DR's 2-12, 2-30 and 3-5 -	52,529.00
														Proforma 2018 NOERR expenses -	555,346.10

LDG Exibit 2
Appendix 2 - Attachment B MOEF Financial Model

DLW Exhibit 1

Rate Stabilization Fund Calculations
Revised 1/24/2020 per Staff Tech DR2's
Resubmitted 2/7/2020 per Staff 3-1
Adjusted per Staff 4-1 on 2/21/2020
Revised 4/1/2020 to reflect Staff DR 4's
Revised 4/9/2020 to reflect Staff Tech 4's
4.67 TIC
Revised 5/20/2020 to refflect tech session and correction of NOERR expenses; Rev 5/27/20

PWW Proforma 5 Year Average 2018 Test Year with MOES

Pro forma Revenue Requirement[1] - $ **35,839,462**
Operating Expense Contingency - **7.66%** **applies against Material Operating Expenses**

Annual Operating Expense increases @ 3.00%

	CBFRR	Material Operating Expense Revenue Requirement (MOERR)	Operating Expense Revenue Requirment (NOERR)[6]	1.0 Debt Service Revenue Requirement (1.0 DSRR)[1]	0.1 Debt Service Reveue Requirement (0.1 DSRR)	Total RSF Funds Required	Available RSF funds on 12/31/2019
Revenue Requirement[2] -	$ 7,729,032	$ 20,391,834	$ 555,346	$ 6,512,046	$ 651,205		$ (964,545)
Percentage of Revenues -	21.57%	56.90%	1.55%	18.17%	1.82%		
1 Year coverage -	$ 148,602	$ 998,945		$ 125,204			
2 Year coverage -	$ 297,204	$ 2,624,794		$ 250,407			
3 Years coverage -	$ 445,806	$ 4,896,352		$ 375,611	$ -		
Calculated Rate Stabilization Fund by Revenue Category for 1 year[3,4,9] -	$ 160,000	$ 1,100,000		$ 140,000		$ 1,400,000	
Calculated Rate Stabilization Fund by Revenue Category for 2 year[3,4,9] -	$ 330,000	$ 2,890,000		$ 280,000		$ 3,500,000	
Calculated Rate Stabilization Fund by Revenue Category for 3 years[3,4,9] -	$ 490,000	$ 5,390,000	No Stabilization Fund	$ 410,000	No Stabilization Fund	$ 6,290,000	
Requested Rate Stabiliation Fund levels[8] -	$ 680,000	$ 2,850,000		$ 390,000		$ 3,920,000	$ 4,884,545
Based on largest variance from five year ave of -	3.40%						

Required Catch up
As a "one time" borrowed amount
to refill the RSF funds awating implementation of the MOES

Revenue Type	2013 PWW Billed Revenue	2014 PWW Billed Revenue	2015 PWW Billed Revenue	2017 PWW Billed Revenue	2018 PWW Billed Revenue
Total Volumetric Charges, includes Unbilled water sales, Unbilled/and Billed Recoupment and abatements	$ 15,093,982	$ 15,340,557	$ 16,357,423	$ 15,457,194	$ 17,516,995
Total Meter Charge (fixed) includes fixed portion of special contracts	$ 8,162,854	$ 8,243,956	$ 8,429,316	$ 8,766,739	$ 9,437,913
WICA/QCPAC revenues	$ -	$ 109,727	$ 367,548	$ 705,661	$ 362,159
Total Private Fire Protection Charges (fixed)	$ 1,027,245	$ 1,039,276	$ 1,058,281	$ 1,089,205	$ 1,210,960
Total Municipal Fire Proection Charges (fixed)	$ 3,047,037	$ 3,060,346	$ 3,075,100	$ 3,116,640	$ 3,442,774
Total Billed Revenue	$ 27,331,118	$ 27,793,862	$ 29,287,668	$ 29,135,439	$ 31,970,800
% of Revenues that are variable	55.2%	55.4%	56.6%	54.4%	55.4%
% of Revenues that are fixed	44.8%	44.6%	43.4%	45.6%	44.6%

Calculation of MOER RSF	Increases Over 2019	Revenue Shortfall
2020 -	$ 608,786	$ 390,160
2021 -	$ 1,235,746	$ 390,103
2022 -	$ 1,881,515	$ 390,044
	$ 3,726,046	$ 1,170,306
	Totals -	$ 4,896,352

Maximum percentage of revenues that were variable during the previous 5 years - 56.56%

Expense Type	2013 PWW Actual Variable Expenses	2014 PWW Actual Variable Expenses	2015 PWW Actual Variable Expenses	2017 PWW Actual Variable Expenses	2018 PWW Actual Variable Expenses
Purchased Water	$ 415,331	$ 393,060	$ 462,177	$ 437,664	$ 472,407
Electric	$ 873,619	$ 898,211	$ 1,164,461	$ 1,053,878	$ 1,152,305
Chemicals	$ 659,914	$ 696,650	$ 668,919	$ 765,438	$ 908,982
Sludge Disposal	$ 246,601	$ 303,057	$ 316,654	$ 385,873	$ 378,140
Total Variable Costs	$ 2,195,465	$ 2,290,978	$ 2,612,211	$ 2,642,853	$ 2,911,834
Variable Expenses as a Percent of Total Revenues	8.0%	8.2%	8.9%	9.1%	9.1%

	2013 PWW Actual Operating Expenses[10]	2014 PWW Actual Operating Expenses[10]	2015 PWW Actual Operating Expenses[10]	2017 PWW Actual Operating Expenses[10]	2018 PWW Actual Operating Expenses[10]
Production Expenses	$ 3,866,154	$ 4,099,167	$ 4,515,441	$ 4,571,844	$ 5,074,509
T&D expenses	$ 1,547,952	$ 1,868,516	$ 1,858,477	$ 2,168,076	$ 2,848,339
Engineering Expenses	$ 833,292	$ 964,081	$ 1,065,646	$ 1,169,359	$ 1,287,747
Customer Acct & Collection Expenses	$ 436,393	$ 442,289	$ 463,937	$ 447,889	$ 489,789
Admin and General Expenses	$ 6,677,427	$ 6,000,562	$ 6,364,880	$ 7,303,584	$ 7,580,371
Inter Div Mgt Fee Expense	$ (2,254,305)	$ (2,270,498)	$ (2,378,932)	$ (3,321,124)	$ (3,288,063)
Amortization Expense[11]	$ 48,059	$ 140,811	$ 167,776	$ 145,441	$ 134,666
Property Tax Expense / Payroll Tax Expense	$ 4,123,297	$ 4,468,936	$ 4,617,857	$ 5,210,697	$ 4,438,775
Payroll Tax Expense					$ 698,087
Cash Tax Expense[12]	$ 99,000	$ 100,000	$ 101,000	$ 103,000	$ 103,249
Total Material Operating Expense	$ 15,377,269	$ 15,813,864	$ 16,776,082	$ 17,798,766	$ 19,367,469
Percent increase in operationg expenses over the prior year		2.84%	6.08%	3.05%	8.81%
				Total increase over 5 years -	25.95%
				Ave. increase per year (inclusive of compounding) -	4.72%

	2013 Actual CCF's sold by PWW	2014 Actual CCF's sold by PWW	2015 Actual CCF's sold by PWW	2017 Actual CCF's sold by PWW	2018 Actual CCF's sold by PWW
Annual Metered Sales (CCF)	4,948,775	4,988,184	5,349,169	5,056,592	5,242,264
Percentage Variance between Current and High Consumption Year	-8.09%	-7.24%	0.00%	-5.79%	-2.04%

LDG Exibit 2
Appendix 2 - Attachment B MOEF Financial Model

Average Consumption (CCF) over the past five years (replacing 2016 with 2013)	5,116,997				
Variance between current and 5 Yr Ave Consumption	-3.40%	-2.58%	4.34%	-1.19%	2.39%

Largest percentage reduction in volumetric sales at **PWW of** 3.40% over the past five years from the five year average of volumetric sales excluding 2016, including 2013

Results in a Revenue loss of based on 5 year average sales less 2016, including 2013	$ 636,621	based on current permanent rate of	$ 3.66 per CCF
Results in an Operating Expense reduction of	$ 98,981	based on 2018 variable operating expenses	
Results in an Operating Income reduction of	$ 537,640		

Notes:
1. Based on Debt Service Multiplier of 1.10 per Sch A of 1604.06 schedules
2. Revenue requirements per Sch A Perm-Modified of 1604.06 schedules
3. Requested Rate Stabilization fund for Operating Expense and P & I Coverage each have a contingency of 10% safety factor
4. PWW share of the $5,000,000 RSF for distribution to the RSF, MOERSF and the P&IRSF is[5] 78.33% based on % of PWW revenues (2012 Case) to % of all three regulated utilities revenues (2012 Cases) or $ 3,920,000
5. Calculation of RSF Pecentage based on Revenue requirements from DW13-126, 13-128 and 13-130

PWW Revenue Requirment -	$ 27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -	$ 6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -	$ 745,186	per DW13-128 Settlement Agreement
Total Utility Revenue Requirement -	$ 35,347,661	

6. For Calculation of Operating Expense Requirement see Exhibit 1.1
7. Inclusive of pro forma to Hudson and Pennichuck East Usage due to the PWW-PEU interconnect - See 1604.06 Schedule 1C
8. Request rate stabilization fund levels based on multiple years of coverage for the MOERR and 1.0 DSRR RSF, and to re-establish all RSF funds to their imprest levels as determined and approved under DW 16-806.
9. WICA/QCPAC revenues are divided between variable and fixed revenues based on the ratio between those revenues without the WICA/QCPAC Revenues per year as follows

Year	Fixed	Variable
2013	44.8%	55.2%
2014	44.6%	55.4%
2015	43.4%	56.6%
2017	45.6%	54.4%
2018	44.6%	55.4%

10. Actual year auditted expenses, including non material operating expenses
11. Amortization expense for 2013, 2014, 2015 and 2017 as provided by NHPUC Staff
12. Cash tax expenses is estimated for 2013, 2014, 2015 and 2017

MOERR RSF Balance Analysis - Increased operating expenses only

Auditted	12/31/2017 MOERR RSF Balance	$ 2,620,152		
Auditted	2018 MOERR Revenues	$ 16,699,145		
Auditted	2018 MOERR Expenses	$ 18,759,594		
Auditted	12/31/2018 MOERR RSF Balance	$ 559,703		
Based on unauditted PWW 2019 Year End Revenues	2019 MOERR Revenues	$ 16,360,684		
Based on unauditted PWW 2019 Year End Expenses	2019 MOERR Expenses	$ 20,293,262		
Based on unauditted PWW 2019 Year End Revenues and Expenses	12/31/2019 MOERR RSF Balance	$ (3,372,875)		
Amount Subject to Current Rate Case Order	Replenish MOERR RSF	$ 2,850,000	to desired value	
Based on current Rate Case filing schedules with full year of approved MOERR per Cell F13 above per 1604.04 Sch A. This $$ amount is less the NOERR and multiplied by the proposed MOERR Contingency Factor plus 75% of property taxes associated with taxable 2019 Capex	2020 MOERR Revenues	$ 20,700,849	Assumes full year at requested 19-084 rates plus recoupment to 9 months of 2019 QCPAC @	3.83%
MOES requested in DW19-084 plus operating expense increase of 3% in 2020 plus increase in 2020 property taxes associated with 2019 QCP's	2020 Material Operating Expenses	$ 20,494,081		
	12/31/2020 MOERR RSF Balance	$ 3,056,767		
Based on current Rate Case filing MOERR per Cell F13 above. This $$ amount plus 25% of property taxes associated with taxable 2019 assets plus 75% of property taxes associated with taxable 2019 and 2020 Capex	2021 MOERR Revenues	$ 20,983,008	Assumes 3 months of 2019 QCPAC plus 9 months of 2020 QCPAC @	6.46%
MOES requested in DW19-084 plus operating expense increases of 3% per year for 2020 and 2021 plus property taxes on 2019 and 2020 QCP's	2021 Material Operating Expenses	$ 21,335,416		
	12/31/2021 MOERR RSF Balance	$ 2,704,360		
Based on current Rate Case filing MOERR per Cell F13 above. This $$ amount plus 25% of property taxes associated with taxable 2019 and 2020 assets plus 75% of property taxes associated with taxable 2019, 2020 and 2021 Capex	2022 MOERR Revenues	$ 21,253,436	Assumes 3 months of 2020 QCPAC plus 9 months of 2021 QCPAC @	10.13%
MOES requested in DW19-084 plus operating expense increases of 3% per year for 2020, 2021 and 2022plus property taxes on 2019, 2020 and 2021 QCP's	2022 Material Operating Expenses	$ 22,236,898		
	12/31/2022 MOERR RSF Balance	$ 1,720,898		
Based on 2022 MOE times allowed MOES factor plus 9 months of 2022 property taxes related 2021 QCP's	2023 MOERR Revenues	$ 24,187,957	Assumes full year at requested 22-xxx rates plus recoupment to 9 months of 2022 QCPAC	3%
MOES requested in DW22-xx plus operating expense increase of 3% in 2023 plus increase in 2023 property taxes associated with 2022 QCP's	2023 Material Operating Expenses	$ 23,235,712		
	12/31/2023 MOERR RSF Balance	$ 2,673,144		

LDG Exibit 2

Appendix 2 - Attachment B MOEF Financial Model

Pennichuck Water Works, Inc.
Accounts Excluded From MOERR
DW 19-084
Revised per Staff DR 2-37; Rev 5/27/20

															(1) Test Year 2018 Totals
921002	SENIOR MANAGEMENT VEHICLES	165.33	-	154.01	199.91	1,462.15	563.18	136.13	202.31	-	259.43	231.32	-	**3,373.77**	3,373.77
921003	SENIOR MGMT - FUEL PURCHASED	268.27	290.78	581.48	292.31	-	29.40	460.43	518.38	478.78	401.56	412.62	352.66	**4,086.67**	4,086.67
921004	SENIOR MGMT-VEH REGISTRATION	-	-	-	-	-	-	-	-	990.60	-	-	-	**990.60**	990.60
923000	OUTSIDE SERVICES	26,089.44	52,203.05	18,573.97	35,287.99	39,854.29	44,858.22	23,959.26	20,603.55	22,444.81	47,134.61	24,067.78	30,282.72	**385,359.69**	385,359.69
926001	OFFICER'S LIFE INSURANCE	386.19	386.19	386.19	386.19	386.19	386.19	386.19	386.19	2,055.19	386.19	386.19	386.19	**6,303.28**	6,303.28
926500	MISC EMPLOYEE BENEFITS	4,364.64	1,732.33	1,830.57	1,310.04	365.44	2,627.19	720.54	(7,570.39)	1,452.24	1,883.76	2,924.33	(2,881.77)	**8,758.92**	8,758.92
926501	MISC EMPLOYEE BENEFITS-WELLNESS	-	-	630.70	(1,105.00)	6,715.00	(1,056.52)	(282.08)	(2,770.73)	853.41	(1,109.16)	10.00	1,485.76	**3,371.38**	3,371.38
926502	MISC EMPLOYEE BENEFITS-ACTIVITIES	-	-	-	-	-	-	-	948.43	354.49	3,102.63	2,500.00	4,768.88	**11,674.43**	11,674.43
926505	EMPLOYEE RELATIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
926600	TUITION REIMBURSEMENTS	6,510.00	-	2,972.84	-	4,088.37	976.85	3,801.00	-	99.70	5,642.87	1,476.90	6,677.77	**32,246.30**	32,246.30
926610	TRAINING EDUCATIONAL SEMINARS	1,180.00	1,305.00	-	4,016.34	708.00	2,754.50	2,383.98	280.00	11,188.41	19,877.43	606.45	6,667.33	**50,967.44**	50,967.44
930100	MEETINGS & CONVENTIONS	915.00	5,299.70	5,343.92	5,644.97	526.53	273.33	908.96	33.33	13,381.78	659.00	1,496.66	841.61	**35,324.79**	35,324.79
930101	MEMBERSHIPS	3,833.91	3,698.91	139.98	4,262.29	3,829.66	3,857.62	2,463.42	3,159.92	2,524.71	2,042.72	3,308.76	2,467.63	**35,589.53**	35,589.53
930200	PUBLIC RELATIONS	-	429.65	913.96	2,681.64	5,989.22	13,011.91	887.53	535.24	-	443.57	372.60	359.64	**25,624.96**	25,624.96
930300	MEALS	390.09	610.33	398.83	282.21	411.20	147.01	291.72	396.51	122.94	742.99	382.58	26.93	**4,203.34**	4,203.34
930410	CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
														Total of Non RSF backed O&M Expenses -	607,875.10
														Adjustment to NOERR expenses per Staff DR's 2-12, 2-30 and 3-5 -	52,529.00
														Proforma 2018 NOERR expenses -	555,346.10

LDG Exibit 2

DW 19-084
PENNICHUCK WATER WORKS, INC.
SUMMARY - CALCULATION OF REVENUE REQUIREMENT

Appendix 2, Attachment C

	REVENUE REQUIREMENT PER COMPANY'S ORIGINAL FILING		REVENUE REQUIRMENT PER SETTLEMENT: ESTIMATED[1] (DW 20-055 Financing @ 3.67% Total Interest Cost)		MAXIMUM[2] (DW 20-055 Financing @ 4.67% Total Interest Cost)	
CITY BOND FIXED REVENUE REQUIREMENT (CBFRR)						
1) City Bond Fixed Revenue Requirement (CBFRR) (Schedule 1)	**$ 7,729,032**		**$ 7,729,032**		**$ 7,729,032**	
OPERATING EXPENSE REVENUE REQUIREMENT (OERR) (Schedules 2.1/2.2)						
2) Total Pro Forma Operation & Maintenance Expenses	$ 14,739,018		$ 14,581,494		$ 14,581,494	
3) Pro Forma Property Tax Expense	4,547,936		3,968,596		3,968,596	
4) Pro Forma Payroll Tax Expense	698,087		698,087		698,087	
5) Pro Forma Amortization Expense	415,268		145,720		145,720	
6) Pro Forma Income Tax Expense	103,249		103,249		103,249	
7) Total Operating Expenses [(2) + (3) + (4) + (5) + (6)]	**20,503,558**		**19,497,146**		**19,497,146**	
MATERIAL OPERATING EXPENSE SUPPLEMENT (MOES)						
8) Less: Non-Material Operating Expenses (Schedule 2b)			(555,346)		(555,346)	
9) Material Operating Expenses [(7) - (8)]			18,941,800		18,941,800	
10) Material Operating Expense Factor (MOEF) per Settlement			x 9.50%		x 7.66%	
11) MOEF Calculated Result [(9) x (10)]			**1,799,471**		**1,450,033**	
12) Operating Expense Revenue Requirement (OERR) [(7) + (11)]	**$ 20,503,558**		**$ 21,296,617**		**$ 20,947,179**	
DEBT SERVICE REVENUE REQUIREMENT (DSRR) (Schedule 3)						
13) Pro Forma Test Year Annual Debt Service	$ 6,999,023		$ 7,002,631		$ 7,002,631	
14) Debt Service Coverage Requirement	x 1.1		x 1.1		x 1.1	
15) Debt Service Revenue Requirement (DSRR) [(13) x (14)]	**7,698,925**		**7,702,894**		**7,702,894**	
16) **REVENUE REQUIREMENT BEFORE APPLICATION OF DEBT SERVICE SAVINGS RESULTING FROM DW 20-055 FINANCING [(1) + (12) + (15)]**	**$ 35,931,515**		**$ 36,728,543**		**$ 36,379,105**	
REDUCTION IN REVENUE REQUIREMENT RESULTING FROM DW 20-055 FINANCING						
17) Less: Estimated Debt Service Savings from DW 20-055 Financing (Schedule 3)			(970,374)		(490,585)	
18) Debt Service Coverage Requirement			x 1.1		x 1.1	
19) Estimated Reduction in Revenue Requirement [(17) x (18)]			**(1,067,411)**		**(539,644)**	
20) **TOTAL PROPOSED REVENUE REQUIREMENT** [(16) - (19)]	**$ 35,931,515**		**$ 35,661,131**		**$ 35,839,461**	
CALCULATION OF PERCENT INCREASE (DECREASE) IN ANNUAL WATER REVENUES						
21) Total Proposed Revenue Requirement [(20)]	$ 35,931,515		$ 35,661,131		$ 35,839,461	
22) Less: Pro Forma Test Year Other Operating Revenues (Schedules 2.1/2.2)	(420,712)		(420,712)		(420,712)	
23) Total Proposed Water Revenues from Base Rates [(21) - (22)]	**$ 35,510,803**		**$ 35,240,419**		**$ 35,418,749**	
24) Less: Pro Forma Test Year Water Revenues from Base Rates (Schedules 2.1/2.2)	(31,732,664)		(31,649,316)		(31,649,316)	
25) **Proposed Increase / (Decrease) in Annual Water Revenues from Base Rates [(23) - (24)]**	**$ 3,778,139**	**11.91%**	**$ 3,591,103**	**11.35%**	**$ 3,769,433**	**11.91%**
26) Less: Pro Forma Test Year Water Revenues from QCPAC (Schedules 2.1/2.2)	(1,169,488)		(1,248,097)		(1,248,097)	
27) **Proposed Increase / (Decrease) in Total Annual Water Revenues [(25) - (26)]**	**$ 2,608,651**	**8.22%**	**$ 2,343,006**	**7.40%**	**$ 2,521,336**	**7.97%**

Notes:

(1) Presented under the scenario whereby the Co's proposed DW 20-055 Financing is issued at the currently estimated 3.67% Total Interest Cost resulting in net annual debt service savings of $970,374 (Sch 3), thereby enabling the Co to include a MOEF of 9.50% in the MOERR component of its overall revenue requirement, resulting in a revenue increase of 11.35%.

(2) Presented under the scenario whereby the Co's proposed DW 20-055 Financing is issued at an estimated 4.67% Total Interest Cost resulting in net annual debt service savings of $490,585 (Sch 3), thereby only enabling the Co to include a MOEF of 7.66% in the MOERR component of its overall revenue requirement so as not exceed PWW's originally proposed increase in its revenue requirement of 11.91%.

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 1 - CALCULATION OF PWW'S SHARE OF CITY BOND FIXED REVENUE REQUIREMENT (CBFRR)

Total City Bond	$	150,570,000	
Bond Interest Rate		4.09%	
Bond Period		30	yrs.
Total City Bond	$	150,570,000	
Less Rate Stabilization fund	$	5,000,000	
Amount of City Bond to be prorated between Utilities CBFRR	$	145,570,000	
PWW Share of CBFRR		88.12%	
PWW Prorate share	$	128,282,230	
Add back PWW Pro Rata Share of Rate Stabilization Reserve	$	3,920,000	
Total PWW Pro Rata Share for CBFRR/MARA	$	132,202,230	
Bond Interest Rate		4.09%	
Bond Period		30	yrs.
PWW CBFRR Requirement	**$**	**7,729,032**	

Notes:

Pro Rata Calculation as follows:(1)

PWW & Southwood Equity (12/31/2011) (2)	$	56,442,675	88.12%
PEU Equity (12/31/2011)	$	6,540,063	10.21%
PAC Equity (12/31/2011)	$	1,066,353	1.66%
	$	64,049,091	100.00%

Calculation of RSF Pecentage based on Revenue requirements from DW13-126, 13-128 and 13-130

RSF amount funded by City Bond -	$	5,000,000	
PWW Revenue Requirment -	$	27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -	$	6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -	$	745,186	per DW13-128 Settlement Agreement
PWW Share of RSF as a percentage -		78.33%	
PWW Share of RSF in $$ -	$	3,920,000	

Distribution of RSF funds to Revenue Requirement RSF's (3)

CBFRR RSF	$	680,000
MOERR RSF	$	2,850,000
1.0 DSRR RSF	$	390,000
	$	3,920,000

(1) Calculations are from DW11-026
(2) Consists of Equity as of 12/31/2011 as follows:

PWW	$	54,395,626
Southwood	$	2,047,049
Total	$	56,442,675

(3) PWW RSF fund levels as established in DW16-806

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Appendix 2, Attachment C

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2.1 - OPERATING INCOME STATEMENT AND DETAILED CALCULATION OF ESTIMATED REVENUE REQUIREMENT

	Company Proposal per Original Filing			Settlement Proposal			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Test Year Operating Income	Pro Forma Adj's Per Co's Filing	Pro Forma Operating Income Per Co' Filing (Co's Sch 1)	Adj's per Co Responses to Staff DR's (Sch 2a)	Pro Forma Operating Income Per Settlement	Revenue Increase per Settlement	Revenue Requirement per Settlement
OPERATING REVENUES							
Revenues from Water Sales:							
Water Revenues from Base Rates	$ 31,608,641	$ 124,023	$ 31,732,664	$ (83,348)	$ 31,649,316	**$ 3,591,103**	**$ 35,240,419**
Water Revenues from QCPAC	362,158	807,330	1,169,488	78,609	1,248,097	(1,248,097)	-
Total Water Revenues from Water Sales	31,970,799	931,353	32,902,152	(4,739)	32,897,413	2,343,006	35,240,419
Water Sales for Resale	3,321		3,321		3,321		3,321
Other Operating Revenues	416,551	840	417,391		417,391		417,391
Total Operating Revenues	32,390,671	932,193	33,322,864	(4,739)	33,318,125	**2,343,006**	**35,661,131**
OPERATING EXPENSES							
Operation and Maintenance Expenses:							
Production Expense	5,074,509	223,378	5,297,887	8,300	5,306,187		5,306,187
Transmission and Distribution Expense	2,848,339	98,367	2,946,706	(25,258)	2,921,448		2,921,448
Engineering Expense	1,287,747	11,317	1,299,064		1,299,064		1,299,064
Customer Account and Collection Expense	489,789	9,700	499,489		499,489		499,489
Administrative and General Expense	7,580,371	551,328	8,131,699	(231,028)	7,900,671		7,900,671
Inter-Division Management Fee	(3,288,063)	(147,764)	(3,435,827)	90,462	(3,345,365)		(3,345,365)
Total Operation and Maintenance Expenses	13,992,692	746,326	14,739,018	(157,524)	14,581,494	-	14,581,494
Other Operating Expenses:							
Property Tax Expense	4,438,775	109,161	4,547,936	(579,340)	3,968,596		3,968,596
Payroll Tax Expense	698,087		698,087		698,087		698,087
Gain from Forgiveness of SRF Debt	(59,384)	59,384	-		-		-
Depreciation Expense	5,839,694	(5,839,694)	-		-		-
Amortization of Acquisition Adjustment	(27,026)	27,026	-		-		-
Amortization - CIAC	(740,182)	740,182	-		-		-
Amortization Expense	1,965,332	(1,550,064)	415,268	(269,548)	145,720		145,720
Total Other Operating Expenses	12,115,296	(6,454,005)	5,661,291	(848,888)	4,812,403	-	4,812,403
Income Tax Expense:							
State Income Tax Expense	794,209	(690,960)	103,249		103,249		103,249
Federal Income Tax Expense	1,592,022	(1,592,022)	-		-		-
Total Income Tax Expense	2,386,231	(2,282,982)	103,249	-	103,249	-	103,249
Total Operating Expenses	28,494,219	(7,990,661)	20,503,558	(1,006,412)	19,497,146	-	19,497,146
NET OPERATING INCOME	**$ 3,896,452**	**$ 8,922,854**	**$ 12,819,306**	**$ 1,001,673**	**$ 13,820,979**	**$ 2,343,006**	**$ 16,163,985**

LDG Exibit 2

Appendix 2, Attachment C

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2.1 - OPERATING INCOME STATEMENT AND DETAILED CALCULATION OF ESTIMATED REVENUE REQUIREMENT

CALCULATION OF REVENUE DEFICIENCY AND REQUIRED INCREASE @ AN ESTIMATED DW 20-055 FINANCING TOTAL INTEREST COST OF 3.67%:	PER COMPANY		SETTLEMENT ADJUSTMENTS		PER SETTLEMENT		REVENUE INCREASE		PRO FORMA
NET OPERATING INCOME	**$ 12,819,306**		**$ 1,001,673**		**$ 13,820,979**		**$ 2,343,006**		**$ 16,163,985**
LESS: MATERIAL OPERATING EXPENSE FACTOR (MOEF) CALCULATION									
TOTAL OPERATING EXPENSES	(20,503,558)		1,006,412		(19,497,146)		-		(19,497,146)
LESS: NON-MATERIAL OPERATING EXPENSES	607,875		(52,529)		555,346		-		555,346
MATERIAL OPERATING EXPENSES	(19,895,683)		953,883		(18,941,800)		-		(18,941,800)
x MATERIAL OPERATING EXPENSE FACTOR (MOEF)	9.50%	x	9.50%	x	9.50%	x	9.50%	x	9.5%
MOEF CALCULATED RESULT	**(1,890,090)**		**90,619**		**(1,799,471)**		**-**		**(1,799,471)**
LESS: CITY BOND FIXED REVENUE REQUIREMENT (CBFRR)	**(7,729,032)**		**-**		**(7,729,032)**		**-**		**(7,729,032)**
LESS: DEBT SERVICE REVENUE REQUIREMENT (DSRR)									
PRO FORMA DEBT SERVICE	(6,999,023)		(3,608)		(7,002,631)		-		(7,002,631)
x DEBT COVERAGE REQUIREMENT	1.1	x	1.1	x	1.1	x	1.1	x	1.1
DEBT SERVICE REVENUE REQUIREMENT (DSRR)	**(7,698,925)**		**(3,969)**		**(7,702,894)**		**-**		**(7,702,894)**
ADD: ESTIMATED CASH FLOW SAVINGS FROM DW 20-055 FINANCING									
ESTIMATED DEBT SERVICE SAVINGS @ 3.67 TOTAL INTEREST COST	970,374		-		970,374		-		970,374
x DEBT COVERAGE REQUIREMENT	1.1	x	1.1	x	1.1	x	1.1	x	1.1
TOTAL ESTIMATED CASH FLOW SAVINGS FROM DW 20-055 FINANCING	**1,067,411**		**-**		**1,067,411**		**-**		**1,067,411**
CALCULATED ESTIMATED REVENUE (DEFICIENCY) / INCREASE	**$ (3,431,330)**		**$ 1,088,323**		**$ (2,343,006)**		**$ 2,343,006**		**$ -**

Revenue Requirement Component Summary:

City Bond Fixed Revenue Requirement (CBFRR):			**$ 7,729,032**
Operating Expense Revenue Requirement (OERR):			
Total O & M Expenses		$ 14,581,494	
Property Tax Expense		3,968,596	
Payroll Tax Expense		698,087	
Amortization Expense		145,720	
Income Tax Expense		103,249	
Totoal Operating Expenses		**19,497,146**	
Less: Non-Material Operating Expenses		(555,346)	
Material Operating Expenses		18,941,800	
Material Operating Expense Factor (MOEF)	x	9.50%	
MOEF Calculated Result		**1,799,471**	**21,296,617**
Debt Service Revenue Requirement (DSRR):			
Pro Forma Debt Service		$ 7,002,631	
Debt Service Coverage Requirement	x	1.1	**7,702,894**
Estimated Cash Flow Savings from DW 20-055 Financing:			
Estimated Debt Service Savings @ 3.67% Total Interest Cost		$ (970,374)	
Debt Service Coverage Requirement	x	1.1	**(1,067,411)**
Total Estimated Revenue Requirement			**$ 35,661,131**

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Appendix 2, Attachment C

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2.2 - OPERATING INCOME STATEMENT AND DETAILED CALCULATION OF MAXIMUM REVENUE REQUIREMENT

	Company Proposal per Original Filing			**Settlement Proposal**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Test Year Operating Income	Pro Forma Adj's Per Co's Filing	Pro Forma Operating Income Per Co' Filing (Co's Sch 1)	Adj's per Co Responses to Staff DR's (Sch 2a)	Pro Forma Operating Income Per Settlement	Revenue Increase per Settlement	Revenue Requirement per Settlement
OPERATING REVENUES							
Revenues from Water Sales:							
Water Revenues from Base Rates	$ 31,608,641	$ 124,023	$ 31,732,664	$ (83,348)	$ 31,649,316	**$ 3,769,433**	**$ 35,418,749**
Water Revenues from QCPAC	362,158	807,330	1,169,488	78,609	1,248,097	(1,248,097)	-
Total Water Revenues from Water Sales	31,970,799	931,353	32,902,152	(4,739)	32,897,413	2,521,336	35,418,749
Water Sales for Resale	3,321		3,321		3,321		3,321
Other Operating Revenues	416,551	840	417,391		417,391		417,391
Total Operating Revenues	32,390,671	932,193	33,322,864	(4,739)	33,318,125	**2,521,336**	**35,839,461**
OPERATING EXPENSES							
Operation and Maintenance Expenses:							
Production Expense	5,074,509	223,378	5,297,887	8,300	5,306,187		5,306,187
Transmission and Distribution Expense	2,848,339	98,367	2,946,706	(25,258)	2,921,448		2,921,448
Engineering Expense	1,287,747	11,317	1,299,064		1,299,064		1,299,064
Customer Account and Collection Expense	489,789	9,700	499,489		499,489		499,489
Administrative and General Expense	7,580,371	551,328	8,131,699	(231,028)	7,900,671		7,900,671
Inter-Division Management Fee	(3,288,063)	(147,764)	(3,435,827)	90,462	(3,345,365)		(3,345,365)
Total Operation and Maintenance Expenses	13,992,692	746,326	14,739,018	(157,524)	14,581,494	-	14,581,494
Other Operating Expenses:							
Property Tax Expense	4,438,775	109,161	4,547,936	(579,340)	3,968,596		3,968,596
Payroll Tax Expense	698,087		698,087		698,087		698,087
Gain from Forgiveness of SRF Debt	(59,384)	59,384	-		-		-
Depreciation Expense	5,839,694	(5,839,694)	-		-		-
Amortization of Acquisition Adjustment	(27,026)	27,026	-		-		-
Amortization - CIAC	(740,182)	740,182	-		-		-
Amortization Expense	1,965,332	(1,550,064)	415,268	(269,548)	145,720		145,720
Total Other Operating Expenses	12,115,296	(6,454,005)	5,661,291	(848,888)	4,812,403	-	4,812,403
Income Tax Expense:							
State Income Tax Expense	794,209	(690,960)	103,249		103,249		103,249
Federal Income Tax Expense	1,592,022	(1,592,022)	-		-		-
Total Income Tax Expense	2,386,231	(2,282,982)	103,249	-	103,249	-	103,249
Total Operating Expenses	28,494,219	(7,990,661)	20,503,558	(1,006,412)	19,497,146	-	19,497,146
NET OPERATING INCOME	**$ 3,896,452**	**$ 8,922,854**	**$ 12,819,306**	**$ 1,001,673**	**$ 13,820,979**	**$ 2,521,336**	**$ 16,342,315**

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Appendix 2, Attachment C

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2.2 - OPERATING INCOME STATEMENT AND DETAILED CALCULATION OF MAXIMUM REVENUE REQUIREMENT

CALCULATION OF REVENUE DEFICIENCY AND REQUIRED INCREASE @ AN ESTIMATED DW 20-055 FINANCING TOTAL INTEREST COST OF 4.67%:	PER COMPANY		SETTLEMENT ADJUSTMENTS		PER SETTLEMENT		REVENUE INCREASE		PRO FORMA
NET OPERATING INCOME	**$ 12,819,306**		**$ 1,001,673**		**$ 13,820,979**		**$ 2,521,336**		**$ 16,342,315**
LESS: MATERIAL OPERATING EXPENSE SUPPLEMENT (MOES)									
TOTAL OPERATING EXPENSES	(20,503,558)		1,006,412		(19,497,146)		-		(19,497,146)
LESS: NON-MATERIAL OPERATING EXPENSES	607,875		(52,529)		555,346		-		555,346
MATERIAL OPERATING EXPENSES	(19,895,683)		953,883		(18,941,800)		-		(18,941,800)
x MATERIAL OPERATING EXPENSE FACTOR (MOEF)	7.66%	x	7.66%	x	7.66%	x	7.66%	x	7.7%
MOEF CALCULATED RESULT	**(1,523,054)**		**73,022**		**(1,450,033)**		**-**		**(1,450,033)**
LESS: CITY BOND FIXED REVENUE REQUIREMENT (CBFRR)	**(7,729,032)**		**-**		**(7,729,032)**		**-**		**(7,729,032)**
LESS: DEBT SERVICE REVENUE REQUIREMENT (DSRR)									
PRO FORMA DEBT SERVICE	(6,999,023)		(3,608)		(7,002,631)		-		(7,002,631)
x DEBT COVERAGE REQUIREMENT	1.1	x	1.1	x	1.1	x	1.1	x	1.1
DEBT SERVICE REVENUE REQUIREMENT (DSRR)	**(7,698,925)**		**(3,969)**		**(7,702,894)**		**-**		**(7,702,894)**
ADD: ESTIMATED CASH FLOW SAVINGS FROM DW 20-055 FINANCING									
ESTIMATED DEBT SERVICE SAVINGS @ 4.67 TOTAL INTEREST COST	490,585		-		490,585		-		490,585
x DEBT COVERAGE REQUIREMENT	1.1	x	1.1	x	1.1	x	1.1	x	1.1
TOTAL ESTIMATED CASH FLOW SAVINGS FROM DW 20-055 FINANCING	**539,644**		**-**		**539,644**		**-**		**539,644**
CALCULATED MAXIMUM REVENUE (DEFICIENCY) / INCREASE	**$ (3,592,062)**		**$ 1,070,726**		**$ (2,521,336)**		**$ 2,521,336**		**$ -**

Revenue Requirement Component Summary:

City Bond Fixed Revenue Requirement (CBFRR):			**$ 7,729,032**
Operating Expense Revenue Requirement (OERR):			
Total O & M Expenses		$ 14,581,494	
Property Tax Expense		3,968,596	
Payroll Tax Expense		698,087	
Amortization Expense		145,720	
Income Tax Expense		103,249	
Totoal Operating Expenses		**19,497,146**	
Less: Non-Material Operating Expenses		(555,346)	
Material Operating Expenses		18,941,800	
Material Operating Expense Factor (MOEF)	x	7.66%	
MOEF Calculated Result		**1,450,033**	**20,947,179**
Debt Service Revenue Requirement (DSRR):			
Pro Forma Debt Service		$ 7,002,631	
Debt Service Coverage Requirement	x	1.1	**7,702,894**
Estimated Cash Flow Savings from DW 20-055 Financing:			
Estimated Debt Service Savings @ 4.67% Total Interest Cost		(490,585)	
Debt Service Coverage Requirement	x	1.1	**(539,644)**
Total Maximum Revenue Requirement			**$ 35,839,461**

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2a - OPERATING INCOME ADUSTMENTS PER COMPANY RESPONSES TO STAFF DATA REQUESTS

OPERATING REVENUES

REVENUES FROM WATER SALES

Water Revenues from Base Rates:

Town of Hudson Sales:	Staff Tech 2-24	$ 309,436	
	Staff 3-16	(339,391)	$ (29,955)
Calculation of 5-Year Average:	Staff Tech 2-16		(53,393)
Total Adjustments - Water Revenues from Base Rates			(83,348)

Water Revenues from QCPAC:

Pro-forma Annual QCPAC Revenues:	Staff Tech 2-3		86,989
Calculation of 5-Year Average:	Staff Tech 2-16	26,761	
	Staff 3-16	(35,141)	(8,380)
Total Adjustments - Water Revenues from QCPAC			78,609
TOTAL ADJUSTMENTS - OPERATING REVENUES			**$ (4,739)**

OPERATING EXPENSES

OPERATION AND MAINTENANCE EXPENSES

Production Expense:

Purchased Power:	Staff 2-10	$ 19,640	
	Staff Tech 2-16	(733)	
	Staff 3-13	(2,218)	$ 16,689
Purchased Water:	Staff 2-39	17,671	
	Staff Tech 2-16	(24,156)	(6,485)
Chemicals:	Staff Tech 2-16		(1,904)
Total Adjustments - Production Expense			8,300

Transmission and Distribution Expense:

Miscellaneous:	Staff 2-28	(1,769)	
	Staff Tech 3-5	(15,151)	(16,920)
Maintenance of Mains:	Staff Tech 3-5		(4,952)
Mainenance of Services:	Staff Tech 3-5		(3,386)
Total Adjustments - Transmission and Distribution Expense			(25,258)

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2a - OPERATING INCOME ADUSTMENTS PER COMPANY RESPONSES TO STAFF DATA REQUESTS

Administrative and General Expense:			
Salaries and Wages:	Staff 2-13		44,407
Employee Benefits:	Staff 2-13		21,640
Regulatory Commission Expense:	Staff 2-12		(10,085)
Group Health Insurance:	Staff 2-41		(80,200)
Group Dental Insurance:	Staff 2-42		(2,846)
Office Supplies:	Staff 2-50	(12,175)	
	Staff Tech 3-5	(5,750)	(17,925)
Miscellaneous:	Staff 2-50		(25,534)
Outside Services:	Staff 2-30	(5,520)	
	Staff 2-50	(26,626)	
	Staff Tech 3-5	(27,383)	(59,529)
Maintenance - Computer Equipment:	Staff Tech 2-9		(100,956)
Total Adjustments - Administrative and General Expense			(231,028)
Inter-Division Management Fee:			
Wages and Salaries:	Staff 2-13		(17,609)
Group Health Insurance:	Staff 4-3		21,382
Group Dental Insurance:	Staff 4-3		759
Office Lease:	Staff Tech 2-4		(4,277)
Maintenance - Computer Equipment:	Staff 4-2	(26,917)	
	Staff Tech 3-2	53,834	26,917
ROI Allocation to Affiliates:	Staff 2-25	62,862	
	Staff Tech 2-7	428	63,290
Total Adjustments - Inter-Division Management Fee			90,462
Total Adjustments - Operation and Maintenance Expenses			**(157,524)**

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2a - OPERATING INCOME ADUSTMENTS PER COMPANY RESPONSES TO STAFF DATA REQUESTS

OTHER OPERATING EXPENSES

Property Tax Expense:	Staff Tech 3-3		(579,340)
Amortization Expense:			
Deferred Assets (Pre-existing):	Staff 2-16	(14,341)	
	Staff Tech 2-5	6,594	(7,747)
Transmission and Distribution Expenses:	Staff Tech 3-5		7,830
Office Supplies:	Staff Tech 3-5		1,917
Maintenance - Computer Equipment:	Staff Tech 2-9	11,218	
	Staff Tech 3-4	(2,991)	8,227
Outside Services:	Staff Tech 3-5		7,000
Rate Stabilization Fund - Shortfall:	Staff Tech 2-23		(286,775)
Total Adjustments - Amortization Expense			(269,548)
Total Adjustments - Other Operating Expenses			**(848,888)**
TOTAL ADJUSTMENTS - OPERATING EXPENSES			**$ (1,006,412)**
NET OPERATING INCOME ADJUSTMENTS			**$ 1,001,673**

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 2b - NON-MATERIAL OPERATING EXPENSES

Acct No.	Description	Per Co's 2018 Gen'l Ledger	Adj Per Co Resp's to Staff Data Requests	Adjusted Test Year Balances
921002	SENIOR MANAGEMENT VEHICLES	$ 3,374	$ -	$ 3,374
921003	SENIOR MANAGEMENT - FUEL PURCHASED	4,087	-	4,087
921004	SENIOR MANAGEMENTT - VEHICLE REGISTRATION	991	-	991
923000	OUTSIDE SERVICES	385,360	(52,529)	332,831
926001	OFFICER'S LIFE INSURANCE	6,303	-	6,303
926500	MISCELLANEOUS EMPLOYEE BENEFITS	8,759	-	8,759
926501	MISCELLANEOUS EMPLOYEE BENEFITS - WELLNESS	3,371	-	3,371
926502	MISCELLANEOUS EMPLOYEE BENEFITS - ACTIVITIES	11,674	-	11,674
926505	EMPLOYEE RELATIONS	-	-	-
926600	TUITION REIMBURSEMENT	32,246	-	32,246
926610	TRAINING EDUCATIONAL SEMINARS	50,967	-	50,967
930100	MEETINGS & CONVENTIONS	35,325	-	35,325
930101	MEMBERSHIPS	35,590	-	35,590
930200	PUBLIC RELATIONS	25,625	-	25,625
930300	MEALS	4,203	-	4,203
930410	CHARITABLE CONTRIBUTIONS	-	-	-
	TOTAL NON-MATERIAL OPERATING EXPENSES	**$ 607,875**	**$ (52,529)**	**$ 555,346**

Notes:

	Outside Service Expense		Net
Adj. Per Sch. 2a - Based on Co Responses to Staff Discovery:	**Admin & Gen'l**	**Amortization**	**Adjustment**
Co Response to Staff 2-30	$ (5,520)	$ -	$ (5,520)
Co Response to Staff 2-50	(26,626)	-	(26,626)
Co Response to Staff Tech 3-5	(27,383)	7,000	(20,383)
Net Adjustment - Outside Services	**$ (59,529)**	**$ 7,000**	**$ (52,529)**

DW 19-084
PENNICHUCK WATER WORKS, INC.
SCHEDULE 3 - PRO FORMA TEST YEAR DEBT SERVICE
AND ESTIMATED IMPACT OF DW 20-055 FINANCING

					PRO FORMA PRINCIPAL PAYMENTS					PRO FORMA INTEREST PAYMENTS					PRO FORMA AMORTIZED DEBT COSTS				
Holder	Term	Maturity	Int Rate	OUTSTANDING DEBT	2018 Principal Payments	Pro Forma Adj's per Co Filing	Pro Forma Princ Pmts per Co Filing	Adj's per Co Resp's to Staff DR's	Pro Forma Princ Pmts per Settl'mnt	2018 Interest Payments	Pro Forma Adj's per Co Filing	Pro Forma Int Pmts per Co Filing	Adj's per Co Resp's to Staff DR's	Pro Forma Int Pmts per Settl'mnt	2018 Amortized Debt Costs	Adj's per Co Resp's to Staff DR's	Pro Forma Amort Costs per Settl'mnt	PRO FORMA DEBT SERVICE PER CO FILING	PRO FORMA DEBT SERVICE PER SETTL'MNT
PRO FORMA TEST YEAR DEBT:																			
Outstanding Debt at 12/31/2018:																			
American United Life Insurance (AULI)	25	03/01/21	7.400%	$ 3,200,000	$ 400,000		$ 400,000		$ 400,000	$ 241,733		$ 241,733	$ (19,733) (a)	$ 222,000	$ 8,711	$ (8,711) (c)	$ -	$ 650,444	$ 622,000
SRF Loan - Hubbard Hill	20	04/01/22	3.800%	72,312	22,250		22,250		22,250	3,206		3,206	(846) (a)	2,360	-		-	25,456	24,610
SRF Loan - Contract # 4 (Water Treatment Plant)	20	10/01/29	4.488%	1,916,605	144,459		144,459	5,120 (a)	149,579	69,595		69,595	(5,120) (a)	64,475	234	(234) (c)	-	214,288	214,054
ARRA Loan - Ashley Commons	20	05/01/31	2.952%	325,583	7,988		7,988	981 (a)	8,969	9,922		9,922	(583) (a)	9,339	131	(131) (c)	-	18,041	18,308
ARRA Loan - French Hill	20	07/01/32	2.864%	1,001,421	20,261		20,261	2,680 (a)	22,941	29,508		29,508	(1,549) (a)	27,959	370	(370) (c)	-	50,139	50,900
ARRA Loan - Glenn Ridge	20	09/01/32	2.864%	76,168	1,494		1,494	202 (a)	1,696	2,243		2,243	(116) (a)	2,127	-		-	3,737	3,823
ARRA Loan - Armory (S Nashua Booster Station)	20	01/01/32	2.864%	224,762	4,984		4,984	624 (a)	5,608	6,633		6,633	(367) (a)	6,266	87	(87) (c)	-	11,704	11,874
SRF Loan - Drew Woods	20	06/01/32	2.952%	617,773	36,989		36,989	1,107 (a)	38,096	18,831		18,831	(1,107) (a)	17,724	442	(442) (c)	-	56,262	55,820
SRF Loan - Nashua Core	20	07/01/36	2.464%	1,978,000	89,323		89,323	2,227 (a)	91,550	49,935		49,935	(2,226) (a)	47,709	698	(698) (c)	-	139,956	139,259
SRF Loan - Timberline Booster Station	20	07/01/36	2.616%	297,546	13,237		13,237	350 (a)	13,587	7,972		7,972	(350) (a)	7,622	105	(105) (c)	-	21,314	21,209
SRF Loan - Raw Water Transmission	20	11/01/36	3.168%	3,019,510	107,304		107,304	23,793 (a)	131,097	60,499		60,499	(2,490) (a)	58,009	509	(509) (c)	-	168,312	189,106
SRF Loan - Amherst Street - 2016	30	05/01/47	2.420%	1,383,522	11,019		11,019	8,671 (a)	19,690	33,837		33,837	(621) (a)	33,216	311	(311) (c)	-	45,167	52,906
BNY Mellon - 2014 A Series Bonds	30	01/01/45	Various	38,905,000	1,030,000		1,030,000	45,000 (b)	1,075,000	1,760,318		1,760,318	(47,475) (a)	1,712,843	-		-	2,790,318	2,787,843
BNY Mellon - 2014 B Series Bonds	30	01/01/45	4.500%	5,030,000	95,000		95,000	5,000 (b)	100,000	228,488		228,488	(4,488) (a)	224,000	-		-	323,488	324,000
BNY Mellon - 2015 A Series Bonds	30	01/01/46	Various	19,490,000	545,000		545,000	20,000 (b)	565,000	917,987		917,987	(22,200) (a)	895,787	-		-	1,462,987	1,460,787
BNY Mellon - 2015 B Series Bonds	30	01/01/46	Various	1,840,000	100,000		100,000	5,000 (b)	105,000	94,500		94,500	(5,125) (a)	89,375	-		-	194,500	194,375
BNY Mellon - 2018 A Series Bonds	30	01/01/48	4.900%	4,460,000	-		-		-	100,484	103,891	204,375		204,375	-		-	204,375	204,375
BNY Mellon - 2018 B Series Bonds	30	01/01/48	4.900%	1,075,000	-	85,000	85,000		85,000	22,886	21,821	44,707		44,707	-		-	129,707	129,707
Sub-total: 2018 Outstanding Debt				84,913,202	2,629,308	85,000	2,714,308	120,755	2,835,063	3,658,577	125,712	3,784,289	(114,396)	3,669,893	11,598	(11,598)	-	6,510,195	6,504,956
New Debt Acquired during 2019:																			
BNY Mellon - 2019 A Series Bonds	30	01/01/49	4.220%	8,080,000	-	141,368	141,368	(49,701) (a)	91,667	-	347,460	347,460	923 (a)	348,383	-		-	488,828	440,050
BNY Mellon - 2019 B Series Bonds	30	01/01/48	4.220%	170,000	-		-	56,667 (a)	56,667	-		-	958 (a)	958	-		-	-	57,625
Sub-total: 2019 New Debt				8,250,000	-	141,368	141,368	6,966	148,334	-	347,460	347,460	1,881	349,341	-	-	-	488,828	497,675
PRO FORMA TEST YEAR TOTALS				**$ 93,163,202**	**$ 2,629,308**	**$ 226,368**	**$ 2,855,676**	**$ 127,721**	**$ 2,983,397**	**$ 3,658,577**	**$ 473,172**	**$ 4,131,749**	**$ (112,515)**	**$ 4,019,234**	**$ 11,598**	**$ (11,598)**	**$ -**	**$ 6,999,023**	**$ 7,002,631**

DW 20-055 FINANCING - NET ESTIMATED DEBT SERVICE SAVINGS:	
@ 3.67% Total Interest Cost	
Estimated Annual Debt Service: RSF Replenishment Financing	$ 279,616
Less: Estimated Annual Debt Service Savings: AULI Loan Refinancing	(32,328)
2014A & 2015A/B Bond Refinancing	(1,217,662)
Net Estimated Debt Service Savings @ 3.67% Total Interest Cost	**(970,374)**
ESTIMATED ADJUSTED PRO FORMA TEST YEAR DEBT SERVICE	**$ 6,032,257**
@ 4.67% Total Interest Cost	
Estimated Annual Debt Service: RSF Replenishment Financing	$ 317,017
Less: Estimated Annual Debt Service Savings: AULI Loan Refinancing	(28,096)
2014A & 2015A/B Bond Refinancing	(779,506)
Net Estimated Debt Service Savings @ 4.67% Total Interest Cost	**(490,585)**
ESTIMATED ADJUSTED PRO FORMA TEST YEAR DEBT SERVICE	**$ 6,512,046**

Notes:
(a) Per Co's response to Staff 3-6
(b) Per Co's response to Staff 2-46
(c) Per Co's responses to Staff 2-51 and Staff Tech 2-13

DW 19-084
PENNICHUCK WATER WORKS, INC.
REPORT OF PROPOSED RATE CHANGES - MAXIMUM

LDG Exibit 2
Appendix 2 - Attachment D Customer Class and COSS Impact

Rate or Class of Service	Effect of Proposed Change	Average Number Customers	Maximum Change in Annual Revenues from Base Rates: Pro Forma Test Year Water Revenues	Less: Pro Forma Test Year QCPAC Revenues	Pro Forma Test Year Revenues from Base Rates	Maximum Revenue Requirement from Base Rates	Maximum Change in Annual Revenues from Base Rates: Amount	% Increase	Maximum Change in Total Annual Water Revenues: Maximum Change in Annual Revenues from Base Rates	Less: Pro Forma Test Year QCPAC Revenues	Maximum Change in Total Annual Water Revenues: Amount	% Increase
G-M Residential Fixed Charges	Increase	27,954	$ 7,594,339	$ (289,742)	$ 7,304,597	$ 7,878,194	$ 573,597	7.85%	$ 573,597	$ (289,742)	$ 283,855	3.89%
All Other G-M Charges	Increase		18,716,095	(714,065)	18,002,030	19,848,111	1,846,081	10.25%	1,846,081	(714,065)	1,132,016	6.29%
Total G-M Charges		27,954	26,310,434	(1,003,807)	25,306,627	27,726,305	2,419,678	9.20%	2,419,678	(1,003,807)	1,415,871	5.59%
Private FP	Increase	911	1,260,049	(48,631)	1,211,418	2,084,730	873,312	72.09%	873,312	$ (48,631)	824,681	68.08%
FP - Hydrants	Increase	5	3,582,340	(138,262)	3,444,078	3,797,263	353,185	10.25%	353,185	$ (138,262)	214,923	6.24%
Anheuser-Busch Contract												
Contract Charges	No Increase	2	371,430	-	371,430	371,430	-	0.00%	-	$ -	-	0.00%
Volumetric & Meter Charges	Increase	-	475,941	(19,220)	456,721	503,557	46,836	10.25%	46,836	$ (19,220)	27,616	6.05%
Milford Contract												
Contract Charges	No Increase	1	81,000	-	81,000	81,000	-	0.00%	-	$ -	-	0.00%
Volumetric Charges	Increase	-	87,652	(6,631)	81,021	89,329	8,308	10.25%	8,308	$ (6,631)	1,677	2.07%
Hudson Contract												
Contract Charges	No Increase	1	32,800	-	32,800	32,800	-	0.00%	-	$ -	-	0.00%
Volumetric Charges	Increase	-	63,390	(18,002)	45,388	50,042	4,654	10.25%	4,654	$ (18,002)	(13,348)	-29.41%
Tyngsborough Contract												
Volumetric & Meter Charge	Increase	1	325,735	(13,544)	312,191	344,205	32,014	10.25%	32,014	$ (13,544)	18,470	5.92%
Pennichuck East Utility Contract												
Volumetric & Meter Charge	Increase	1	306,642	-	306,642	338,088	31,446	10.25%	31,446	$ -	31,446	10.25%
		28,876	$ 32,897,413	$ (1,248,097)	$ 31,649,316	$ 35,418,749	**$ 3,769,433**	**11.91%**	$ 3,769,433	$ (1,248,097)	**$ 2,521,336**	**7.97%**

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LDG Exibit 2
Appendix 2 - Attachment D Customer Class and COSS Impact

DW 19-084
PENNICHUCK WATER WORKS, INC.
REPORT OF PROPOSED RATE CHANGES - ESTIMATED

Rate or Class of Service	Effect of Proposed Change	Average Number Customers	Estimated Change in Annual Revenues from Base Rates: Pro Forma Test Year Water Revenues	Less: Pro Forma Test Year QCPAC Revenues	Pro Forma Test Year Revenues from Base Rates	Estimated Revenue Requirement from Base Rates	Estimated Change in Annual Revenues from Base Rates: Amount	% Increase	Estimated Change in Total Annual Water Revenues: Estimated Change in Annual Revenues from Base Rates	Less: Pro Forma Test Year QCPAC Revenues	Estimated Change in Total Annual Water Revenues: Amount	% Increase
G-M Residential Fixed Charges	Increase	27,954	$ 7,594,339	$ (289,742)	$ 7,304,597	$ 7,851,057	$ 546,460	7.48%	$ 546,460	$ (289,742)	$ 256,718	3.51%
All Other G-M Charges	Increase		18,716,095	(714,065)	18,002,030	19,761,680	1,759,650	9.77%	1,759,650	(714,065)	1,045,585	5.81%
Total G-M Charges		27,954	26,310,434	(1,003,807)	25,306,627	27,612,737	2,306,110	8.77%	2,306,110	(1,003,807)	1,302,303	5.15%
Private FP	Increase	911	1,260,049	(48,631)	1,211,418	2,042,273	830,855	68.59%	830,855	$ (48,631)	782,224	64.57%
FP - Hydrants	Increase	5	3,582,340	(138,262)	3,444,078	3,780,728	336,650	9.77%	336,650	$ (138,262)	198,388	5.76%
Anheuser-Busch Contract												
Contract Charges	No Increase	2	371,430	-	371,430	371,430	-	0.00%	-	$ -	-	0.00%
Volumetric & Meter Charges	Increase	-	475,941	(19,220)	456,721	501,365	44,644	9.77%	44,644	$ (19,220)	25,424	5.57%
Milford Contract												
Contract Charges	No Increase	1	81,000	-	81,000	81,000	-	0.00%	-	$ -	-	0.00%
Volumetric Charges	Increase	-	87,652	(6,631)	81,021	88,940	7,919	9.77%	7,919	$ (6,631)	1,288	1.59%
Hudson Contract												
Contract Charges	No Increase	1	32,800	-	32,800	32,800	-	0.00%	-	$ -	-	0.00%
Volumetric Charges	Increase	-	63,390	(18,002)	45,388	49,824	4,436	9.77%	4,436	$ (18,002)	(13,566)	-29.89%
Tyngsborough Contract												
Volumetric & Meter Charge	Increase	1	325,735	(13,544)	312,191	342,706	30,515	9.77%	30,515	$ (13,544)	16,971	5.44%
Pennichuck East Utility Contract												
Volumetric & Meter Charge	Increase	1	306,642	-	306,642	336,616	29,974	9.77%	29,974	$ -	29,974	9.77%
		28,876	$ 32,897,413	$ (1,248,097)	$ 31,649,316	$ 35,240,419	**$ 3,591,103**	**11.35%**	$ 3,591,103	$ (1,248,097)	**$ 2,343,006**	**7.40%**

Customer Class Rate Impact at Maximum Revenue Requirement

Based on 5/8 meter fixed charge @ 7.85%. Private Fire @ 72.09%, MuniFire, all other meter sizes but 5/8" GM fixed, all GM volumetric at same rate in yr 1. 3% increase yr over yr to munifire

6/19/20

4.67% TIC Overall rate increase of 11.91% with MOES @ 7.66%

Customer Class	COSS[1] Recommended Percentage Increase in Revenues	Recommended Increase % by Customer class per settlement	Rate increase at 3% to Munifire at end of Yr. One	Rate increase at 3% to Munifire at end of Yr. Two
G-M 5/8" Fixed -	7.85%	7.85%	0.00%	0.00%
G-M , Fixed, All other meter sizes -	7.85%	10.25%	-0.53%	-0.55%
G-M Residential Volumetric -	7.85%	10.25%	-0.53%	-0.55%
G-M Commercial Volumetric -	7.85%	10.25%	-0.53%	-0.55%
G-M Industrial Volumetric -	7.85%	10.25%	-0.53%	-0.55%
G-M Municipal Volumetric -	7.85%	10.25%	-0.53%	-0.55%
Municipal Fire -	24.20%	10.25%	3.00%	3.00%
Private Fire -	72.09%	72.09%	0.00%	0.00%
A-B Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
A-B Volumetric -	7.85%	10.25%	-0.53%	-0.55%
A-B Fixed meter -	24.20%	10.25%	-0.53%	-0.55%
Milford Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
Milford Volumetric -	7.85%	10.25%	-0.53%	-0.55%
Hudson Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
Hudson Volumetric -	7.85%	10.25%	-0.53%	-0.55%
Tyngsborough Volumetric -	7.85%	10.25%	-0.53%	-0.55%
Tyngsborough Fixed Meter -	7.85%	10.25%	-0.53%	-0.55%
Pennichuck East Minimum Volumetric Fee -	7.85%	10.25%	-0.53%	-0.55%
Pennichuck East Volumetric -	7.85%	10.25%	-0.53%	-0.55%
Pennichuck East Fixed Meter -	7.85%	10.25%	-0.53%	-0.55%

1. Cost of Service Study

Customer Class Rate Impact at Estimated Revenue Requirement

Based on 5/8 meter fixed charge @ 7.85%. Private Fire @ 72.09%, MuniFire, all other meter sizes but 5/8" GM fixed, all GM volumetric at same rate in yr 1. 3% increase yr over yr to munifire

6/19/20

3.67% TIC Overall rate increase of 11.35% with MOES @ 9.50%

Customer Class	COSS[1] Recommended Percentage Increase in Revenues	Recommended Increase % by Customer class per settlement	Rate increase at 3% to Munifire at end of Yr. One	Rate increase at 3% to Munifire at end of Yr. Two
G-M 5/8" Fixed -	7.48%	7.48%	0.00%	0.00%
G-M , Fixed, All other meter sizes -	7.48%	9.77%	-0.53%	-0.55%
G-M Residential Volumetric -	7.48%	9.77%	-0.53%	-0.55%
G-M Commercial Volumetric -	7.48%	9.77%	-0.53%	-0.55%
G-M Industrial Volumetric -	7.48%	9.77%	-0.53%	-0.55%
G-M Municipal Volumetric -	7.48%	9.77%	-0.53%	-0.55%
Municipal Fire -	23.06%	9.77%	3.00%	3.00%
Private Fire -	68.70%	68.59%	0.00%	0.00%
A-B Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
A-B Volumetric -	7.48%	9.77%	-0.53%	-0.55%
A-B Fixed meter -	7.48%	9.77%	-0.53%	-0.55%
Milford Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
Milford Volumetric -	7.48%	9.77%	-0.53%	-0.55%
Hudson Annual Fixed Fee -	0.00%	0.00%	0.00%	0.00%
Hudson Volumetric -	7.48%	9.77%	-0.53%	-0.55%
Tyngsborough Volumetric -	7.48%	9.77%	-0.53%	-0.55%
Tyngsborough Fixed Meter -	7.48%	9.77%	-0.53%	-0.55%
Pennichuck East Minimum Volumetric Fee -	7.48%	9.77%	-0.53%	-0.55%
Pennichuck East Volumetric -	7.48%	9.77%	-0.53%	-0.55%
Pennichuck East Fixed Meter -	7.48%	9.77%	-0.53%	-0.55%

1. Cost of Service Study

Pennichuck Water Works, Inc.
DW19-084
Illustrative Typical Customer Monthly bill pre and post permanent and QCPAC implementation
Staff Tech 5-1 (5-7-20); Supp Staff Tech 5-1 (Rev. 5-29-20)
Revised 6/18/2020 for Settlement

Docket No. 20-153
Exhibit 1

LDG Exibit 2
Appendix 2, Attachment E Illustrative Bills Impact

Monthly Bill Charges

Charge Description	September	October	November	December	January	February	March	April	May	June	July	August	September	October
5/8 inch Meter Customer Charge (1) -	$ 22.58	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27	$ 24.27
Volumetric Charge based on Usage (2) -	$ 28.44	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24	$ 31.24
QCPAC Surcharge (3) -	$ 2.07	$ -	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17
Rate Expense Recoupment (4) -	$ -						$ 0.38	$ 0.38	$ 0.38	$ 0.38	$ 0.38	$ 0.38	$ 0.38	$ 0.38
Temporary to Permanent Rate Recoupment (5) -	$ -	$ -	$ -	$ -	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94	$ 0.94
QCPAC Recoupment (6) -	$ -	$ -	$ 3.26	$ 3.26	$ 3.26	$ 3.26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Bill for month -	$ 53.09	$ 55.51	$ 60.95	$ 60.95	$ 61.89	$ 61.89	$ 59.00	$ 59.00	$ 59.00	$ 59.00	$ 59.00	$ 59.00	$ 59.00	$ 59.00

Notes:

(1) Current tariffed 5/8" meter charge - $ 22.58
(2) The Volumetric Charge is based on the following data:
Average Monthly usage for Single Family Residence per month in 2018 - 7.77 CCF
Current tariffed Rate per CCF - $ 3.66
Projected rate increase percentage to GM Residential volumetric charge - 7.48% based on attached Customer Impact tab from the set of 1600 schedules filed in response to Staff Tech 5 DR's
Projected rate increase percentage to GM Residential 5/8" meter fixed charge - 9.85%
(3) QCPAC Surcharge in effect (granted in DW19-029) - 4.06%
QCPAC Surcharge requested in DW20-020 - 3.92% based on revenue requirment established in last set of 1600 schedules filed in response to Staff Tech 5 DR's
(4) Projected rate case expense of - $ 130,000 to be recouped over 12 months from 28,876 customer accounts
(5) Temporary to Permanent Rate Recoupment based on increase of - 3.42% and recoupment amount earned between March 2020 and September 2020. This number is net of QCPAC reovered during this time frame
recovered over 18 months, beginning in January 2021
(6) QCPAC recoupment from DW20-020 will be recouped over 4 months after issuance of order and authorization of recoupment

TAB 10

Testimony of Donald Ware and Attachments

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 20-153

Pittsfield Aqueduct Company
Permanent Rate Proceeding

DIRECT TESTIMONY OF DONALD L. WARE

November 16, 2020

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I. INTRODUCTION

Q. What is your name and what is your position with the Pittsfield Aqueduct Company?

A. My name is Donald L. Ware. I am the Chief Operating Officer of the Pittsfield Aqueduct Company ("PAC" or "the Company") which is a subsidiary of Pennichuck Corporation. I am employed by and have worked for Pennichuck Water Works, Inc. 1995. I am a licensed professional engineer in New Hampshire, Massachusetts and Maine.

Q. Please describe your educational background.

A. I have a Bachelor in Science degree in Civil Engineering from Bucknell University in Lewisburg, Pennsylvania and I completed all the required courses, with the exception of my thesis, for a Master's degree in Civil Engineering from the same institution. I have a Master's in Business Administration from the Whittemore Business School at the University of New Hampshire.

Q. Please describe your professional background.

A. Prior to joining the Company, I served as the General Manager of the Augusta Water District in Augusta, Maine from 1986 to 1995. I served as the District's engineer between 1982 and 1986. Prior to my engagement with the District, I served as a design engineer for the State of Maine Department of Transportation for six months and before that as a design engineer for Buchart-Horn Consulting Engineers from 1979 to 1982.

Q. What are your responsibilities as Chief Operating Officer of PAC?

A. As Chief Operating Officer, I am responsible for PAC's overall operations, including customer service, water supply, distribution and engineering. I work closely with PAC's

Chief Engineer and other senior managers to help develop PAC's Annual and Three-Year Capital Improvement Plans.

II. PURPOSE OF THIS TESTIMONY

Q. What is the purpose of your testimony?

A. I will be discussing the operations of PAC and how these operations relate to and justify the requested rate increase. I have been principally responsible for preparation of the Filing Requirement Schedules and Rate of Return Information filed at Tabs 12 and 13 of PAC's rate case filing. My testimony will address specific details of these schedules. My testimony will interface with Larry Goodhue's in regard to addressing the revenue and operational pro forma that are part of 1604.06 Schedule 1 ("Sch 1"), requested changes in rate design that are part of 1604.06 Schedule A ("Sch A") and the capital investments that impact 1604.06 Schedule 3 ("Sch 3") and the financing necessary to support the Company's Capital Improvements in 1604.08 Schedule 5 ("Sch 5").

Q. Do you have any general comments regarding these schedules?

A. Yes. The format of the schedules is generally consistent with the format described in the Settlement Agreement filed in DW 16-806 and DW19-084. The filed schedules follow the methodology approved by Order No. 25,292 in Docket No. DW 11-026 as well as the methodology described in the DW 16-806 and DW 19-084 Settlement Agreements reflecting further modifications to the DW 11-026 methodology. To facilitate review of PAC's proposed rate relief, including the proposals for modifications to the ratemaking structure, I have incorporated within these schedules analysis of several scenarios. One scenario applies the ratemaking structure as it was approved in DW 11-026. This scenario is referred to in the schedules as "Perm-Conventional" (see, for example, Schedule A, Tab 12) A second scenario applies the modifications requested by PAC in its Petition for Specific Modifications to its Ratemaking Structure. This scenario is referred to in the schedules as "Proposed" (see, for example, Schedule A, Tab 12).

Q. Why have you incorporated these various scenarios in the ratemaking schedules and rate of return information?

A. As indicated by PAC's full rate case filing, PAC requires rate relief that will allow it to generate revenues sufficient to cover its reasonable operating expenses, its obligations to the City as reflected by the City Bond Fixed Revenue Requirement ("CBFRR"), and its principal and interest obligations. PAC has prepared the ratemaking schedules and rate of return information to incorporate and demonstrate the effects of the proposed modifications within the same analysis that applies the approved ratemaking structure. I believe that this integrated presentation will allow parties to understand the operation of the proposed modifications in the most effective and efficient manner possible. As evaluated in significant detail in DW 16-806, DW 17-128 and DW 19-084, PAC, like PWW and PEU, must operate on a cash flow basis rate making basis instead of a traditional rate of return ratemaking basis due to the fact that it's capital is 100% debt funded and there is no equity in its rate structure. In the proposed rate making formula, principal payments are substituted for depreciation expense to ensure sufficient cash flow to cover the debt service and retirement. This is very clearly based on the fact that the composite Depreciation rate for PAC's 2020 through 2022 Capex of 2.91% would return PAC's invested capital over 34+ years which does not provide sufficient cash flow to pay PAC's principal and interest on the debt issued to pay for the proposed improvements which will have terms of 20 to 30 years.

III. DISCUSSION OF SPECIFIC SCHEDULES AND INFORMATION

Q. Please discuss the various Schedule A's that are part of the filing.

A. I have included two Schedule A's as part of the 1604.06 schedules titled as follows:

1. Sch A Perm-Conventional (Sch A P-C)
2. Sch A Proposed

Q. Please explain the formation Sch A Perm-Conventional.

A. The first column Sch A P-C reflects data from the Test Year ("TY") ending December 31, 2019 without any pro forma adjustments following the prescribed filing process approved as part in DW11-026. The first pro forma column titled "PRO FORMA Adjustments to Test Year" adjusts the 2019 TY data as follows:

(1) The 2019 TY ending rate base was reduced by $2,263,803 reflecting the removal of the equity that was purchased by the City along with the Municipal Acquisition Regulatory Adjustment ("MARA"). The MARA were removed from the Company's rate base because in DW 11-026, the Commission granted PAC the CBFRR component to its revenues to pay for the City's debt incurred in acquiring all the shared of stock in Pennichuck Corporation. The CBFRR component of rates is used in lieu of a return on the equity related portions of rate base that were purchased by the City when it purchased of Pennichuck Corporation.

(2) The 2019 TY Adjusted Net Operating Income was pro formed to reflect known and measurable changes to the 2019 TY revenues, operating expenses and operating deductions that were only partially incurred during 2019 or will be incurred within 12 months of the end of the 2019 TY. These operating expense

and deduction pro forma adjustments will be discussed in detail later in my testimony when I discuss the formulation of Sch 1 P-C.

(3) The 2019 TY Current Revenues found in Sch A P-C were pro formed by reducing by the Company's share of the CBFRR, or $147,539, per Sch 1 Attachment A, page 2.

Q. Please explain the derivation of the Rate of Return (ROR) for the Test Year and for the Proforma Test Year detailed on Schedule A P-C.

A. The Test Year ROR is derived in Schedule 1 of the 1604.08 Schedules. It reflects the short-term intercompany debt and the long term SRF debt on PAC's books as of 12/31/2019 and their associated interest rates.

Q. Please explain what the remaining $14,674 of short-term debt that is reflected in the pro forma 1604.08 Schedule 1.

A. The $14,674 is a short-term intercompany loan from Pennichuck Water Works, Inc. to PAC to provide cash to sustain its operations when cash flow from revenues are not sufficient to cover operating expenses.

Q. Please explain the reasoning behind the additional Puc 1604.06 Schedule titled "Schedule A-Proposed".

A. The additional Schedule A reflects the Company's request for the use of alternate revenue requirement methodologies to the conventional revenue requirement methodology followed in Schedule A P-C and is reflective of the rate making methodologies approved in for PWW in DW16-806 and DW19-084.

Q. Please explain the alternate rate treatment sought by the Company on Puc 1604.06 Schedule A Proposed.

A. The requested rate treatment involves the following modifications:

1. Modifying the test year ending revenues to reflect the average of last five years of volumetric sales (2015 through 2019). The purpose of this adjustment is to eliminate the swings in revenues that can occur between a wet test year followed by a dry year or a dry test year followed by wet year. The normalization of volumetric sales and expenses from the test year to the average of five years of volumetric sales and the associated production related expenses results in smaller swings in Net Income than would otherwise be associated with swings in summer consumption. The Sch A Proposed -5 Yr Ave Current Revenues used are based on 1604.06 Schedule 1C.

2. Adding a Material Operating Expense Revenue Requirement (MOERR) based on the Material Operating Expenses incurred during the Test Year with proformas reflecting known and measurable changes to the Test Year expenses in addition to changes to those operating expenses that are impacted by a change in production expenses associated with using a 5-year average of water produced. The Material Operating expenses (MOE's) used for this revenue requirement do not include Non-Material Operating Expenses (NOE's) as detailed on 1604.06 Sch 1, Attachment I. The MOE's are inclusive of total operating expenses as well as amortization, property tax and income tax expenses.

3. Adding a Material Operating Expense Factor (MOEF) of 6% to provide an operating cushion to test year operating expenses which typically grow year over year due to inflation and other operational pressures, such as changes in regulatory requirements. This MOEF is meant to provide the necessary cash to cover the increases in operating expenses not covered by the revenues granted in the last rate case with the goal of the Company not having to borrow money to cover operating expenses as there is no rate

mechanism to allow for the recovery of cash borrowed to pay the deficit between `operating revenues and expenses.

4. Adding a Non-Material Operating Expense Revenue Requirement (NOERR) which provides the cash to cover approved Test Year expenses that are deemed nonmaterial based on the chart of accounts to which these expenses are ascribed. The applicable chart of accounts from Non-Material Operating Expenses (NOE's) are as approved in DW 16-806.

5. Adding a Debt Service Revenue Requirement (DSRR 1.0) which reflects the revenue necessary to cover the Company's annual debt service (principal and interest payments) associated with all plant in service by the end of the Test Year ending 12/31/2019 as found in Sch 5 of the 1604.08 Schedules. This revenue requirement replaces the conventional revenue requirement methodology that is based on rate base, rate of return and depreciation expense as further detailed in Mr. Goodhue's testimony.
cost of the principal and interest associated with the Company's outstanding debt.

6. Adding a Debt Service and Interest Coverage Requirements (0.1 DSRR) equal to 10% of the DSRR 1.0.

Q. Are the results of the revenue requirement derived from conventional rate making methodology with the CBFRR versus the proposed rate making methodology for the summarized anywhere within your testimony?

A. Yes. Please see Exhibit DLW-1, Tab 12 for this comparison as follows:

(1) Using the rate making methodology approved in DW 11-026 resulted in a revenue requirement of $820,922 or a 6.35% increase over the pro forma test year revenues.

(2) Using the proposed rate making methodology approved in DW 19-084 resulted in a revenue requirement of $862,927 or a 11.18% increase over the pro forma test year revenues.

Q. How do these increases impact the average single-family residential water bill?

A. Please see the Customer Impact schedule tab in the 1604.06 schedules Tab 12 for the impact of the revenue requirement increase detailed above on the average single-family residential bill on a monthly basis. In regard to the Company's proposed rate making methodology, which resulted in a requested overall rate increase of 11.18%, there would be an increase of $6.50 per month to the average single-family monthly water bill of $58.12 resulting in an average monthly water bill of $64.62.

Q. Please discuss the pro forma to the Total Revenues detailed in Puc 1604.06 Schedule 1 P-C and Schedule 1 Proposed, the Operating Income Statement.

A. The Company's Schedule 1 begins with the TY ending 12/31/2019 Revenues. The TY ending Revenues were pro formed in a series of steps as follows:

(1) In arriving at the PRO FORMA Revenues for the 12 months ended 12/31/2019, the TY Revenues were pro formed for the 12 months ending 12/31/2019, by reducing the TY revenues by the sum of: (a) the CBFRR allowed (per Sch 1 Attachment A, Page 2), and (b) by a pro forma adjustment to the test year (Proposed Sch 1 only) volumetric sales related to the five year average calculation found on 1604.06 Schedule 1C.

Q. Please discuss the pro forma to the Total Operating Expenses detailed in Schedule 1 P-C and in Schedule 1 Proposed, the Operating Income Statement.

A. PAC's Schedule 1 begins with the TY ending 12/31/2019. The Pro forma adjustments reflect known and measurable increases/decreases to the 12/31/2019 Test Year Operating

Expenses that occurred during the test year or will occur within 12 months of the end of 2019 TY resulting in the PRO FORMA 12 Months ending 12/31/2019 Operating Expenses. The next PRO FORMA column (found only on Sch 1, Proposed) reflects PRO FORMA Adjustments to the Operating Expenses on Sch 1-Proposed that are associated with the change in pumpage expenses associated with the difference between the 2019 TY pumpage and the Five-Year average production derived in 1604.06 Schedule 1C. Each of the PRO FORMA adjustments in Schedule 1 are explained on the Schedule 1 support schedules.

Q. Please discuss each of the Sch 1 Support Schedules used to develop the pro forma between the Twelve Months 12/31/2019 and the Pro Forma Test Year ending 12/31/2019 in regard to Operating Expenses.

A. Sch 1 Attachment B – Production Account. Pro forma Production expenses are expected to be $1,537 more than the actual 2019 TY production expenses or about a 1.2% increase. This increase is associated with increases to union labor rates which is slighted offset by a reduction in purchased power expenses. The Company also adjusted, production expenses (for the proposed rate making methodology only) to account for an increase the amount of water that would be produced based on the five-year average for the 2019 TY production by $66 to reflect the proforma adjustment purchased power expenses.

Sch 1 Attachment C – Distribution Account. Pro forma Distribution expenses are expected to be $3,117 greater than the 2019 TY Distribution expenses or about a 5.09% increase. This increase is associated with increases in union labor wage rates.

Sch 1 Attachment D Customer Accounts and Collection. Pro forma Customer Accounts and Collection expenses are expected to be $422 less than the 2019 TY expenses or about a 2.7% decrease. The decrease in expenses is the result of decreased print management and postage costs.

Sch 1 Attachment E Administrative and General Account. Pro forma Administrative and General expenses are expected to be $623 greater than the actual 2019 TY expenses or about an 2.3% increase reflecting increases in insurance expense and regulatory commission expenses.

Sch 1, Attachment F Inter Divisional Management Fee expenses. Pro forma Inter Divisional Management Fees in 2020 are expected to increase $1,385 over the 2019 TY Inter Divisional Management Fee expenses as a result of:

1. The Company's 1.42% share Annualized Salary decrease of $134,080 at Pennichuck Water Works resulting in a decrease of $1,904.
2. The Company's 1.42% share of the $3,035 decrease in Pennichuck Water Works office lease expense or a decrease of $43.
3. The Company's 1.42% share of the $22,147 increase in Pennichuck Water Works Pension and Health Retirement expenses or $314.
4. A $3,018 increase associated with a shift in PWW's Tier 1 management fee expenses associated with changes in PWW, PEU, PWSC and PAC's revenues driven by a reduction of PWSC's revenues (due to the reduction of about $1.5 million in revenues associated with the loss of the Hudson operating contract) and an increase in PWW's revenues associated with DW 19-084.

Sch 1 Attachment G Property Taxes Pro forma Property Tax expenses are expected to be $230 less than the actual 2019 TY expenses or about a 0.3% decrease reflecting changes associated with plant additions and retirements and changes to the Town tax rate.

Sch 1 Attachment J Income Taxes Pro forma Income Tax expenses (Federal and State) were reduced by $13,529 to reflect the difference book taxes and actual cash taxes paid. This pro forma only applies to Sch 1 Proposed. The tax pro forma for Sch 1 P-C is found on Sch 1, Attachment L.

Sch 1, Attachment K Deprecation Expenses – Pro forma Depreciation Expenses (only used for rate making on Sch 1 P-C were decreased by $27,111 from the 2019 Test Year depreciation expense of $101,572, primarily due to the elimination of depreciation expenses associated with equity funded assets that were acquired by the City on 1/25/2012.

Sch 1 Attachment L Income Taxes Pro forma Income Tax expenses (Federal and State) were reduced by $44,289 to reflect the difference in book taxes for the 2019 TY and a pro forma of Book Taxes for 2019 accounting for known and measurable changes to the 2019 TY expenses associated with the previously described operating expense and operating deduction pro forma. This pro forma only applies to Sch 1 P-C.

Q. Please compare the total operating expenses for the pro forma Year Ending ("YE") 12/31/19 operating expenses compared to the actual YE 2013 (Last rate case test year for PAC making 2013 YE the equivalent of the pro forma YE 2012) total operating expenses.

A. The Pro forma TY 19 operating expenses (which is the equivalent to the projected YE 2020 operating expenses) are $415,657 versus the YE 2013 operating expenses of

$398,118 or an increase of $17,509 which translates to an average annual increase in operating expenses of less than 1% over the past 6 years.

Q. Please discuss the pro formas to the Total Operating Deductions as detailed in Schedule 1 P-C and Schedule 1 Proposed, the Operating Income Statement.

A. The progression of pro forma to the Company's Total Operating Deductions as detailed in Schedule 1 (Perm-Conventional and Proposed) follows the same steps as detailed in response to the question regarding pro forma to Total Operating Expenses, detailed previously in this testimony.

Q. Please discuss each of the Sch 1 Support Schedules between the Twelve Months 12/31/2019 and the Pro Forma Test Year ending 12/31/2019 in regard to Operating Deductions.

A. Sch 1 Attachment G Property Taxes Pro forma Property Tax expenses are expected to be $230 less than the actual 2019 TY expenses or about a 0.3% decrease reflecting changes associated with plant additions and retirements and changes to the Town tax rate.

Sch 1 Attachment J Income Taxes Pro forma Income Tax expenses (Federal and State) were reduced by $13,529 to reflect the difference book taxes and actual cash taxes paid. This pro forma only applies to Sch 1 Proposed. The tax pro forma for Sch 1 P-C is found on Sch 1, Attachment L.

Sch 1, Attachment K Depreciation Expenses – The pro forma to the Operating Deductions associated with changes to Depreciation and the Acquisition Adjustment Expenses reflect the impact of three (3) pro formas as follows:

(1) The annualization of a half year of depreciation expense to a full year of depreciation expense for plant placed in service between 1/1/2019 and 12/31/2019. This resulted in a pro forma increase in depreciation expense of $274

(2) The elimination of a full year's worth of depreciation associated with plant that was retired from service between 1/1/2019 and 12/31/2019. This resulted in a pro forma decrease in depreciation expense of $59.

(3) A reduction in depreciation expense in the amount of $27,325. This was associated with the elimination of depreciation expense related to the elimination of $1,063,241 of equity-related assets in accordance with Order 25,292 in Docket No. DW 11-026. Additionally, pro forma was made to Depreciation Expenses (only used for rate making on Sch 1 P-C) associated with plant additions and retirements that occurred during the Test Year. The net impact of these adjustments in depreciation expense was a decrease in the Test Year depreciation expense of $101,572 by $27,111.

Sch 1 Attachment L Income Taxes Pro forma Income Tax expenses (Federal and State) were reduced by $44,289 to reflect the difference in book taxes for the 2019 TY and a pro forma of Book Taxes for 2019 accounting for known and measurable changes to the 2019 TY expenses associated with the previously described operating expense and operating deduction pro forma. This pro forma only applies to Sch 1 P-C.

Q. Please discuss the pro forma to the Operating Deductions related to Amortization Expense.

A. The pro forma to the Operating Deductions associated with changes to Amortization Expenses were reduced by $34,349 associated with the elimination of the amortization of the MARA in accordance with Order 25,292 (DW 11-026) in the amount of $200,394.

Q. Please explain the Pro Forma adjustments made in Sch 1 Proposed to the Total Operating Expenses applied to the PRO FORMA 12/31/2019 column using the FIVE-YEAR AVE for volumetric sales as opposed to the TY 2019 volumetric sales.

A. Just as revenue levels were normalized in Sch 1- Propose to reflect the difference between the 2019 volumetric sales and the Five-Year average of volumetric sales the operating expenses that are impacted by the change in production expenses have been normalized to reflect the change in operating expenses associated with producing the difference between the Five-Year Average production volumes and the TY 2019 production volumes. This proforma was made to the 2019 pro forma Test Year expenses and is detailed on 1604.06 Sch 1, Attachment B.

Q. What operating expenses are impacted by the change in production volume.

A. The primary expense impacted by a change in production volumes is the electric expenses required to produce and deliver the water to customers

Q. What is the total impact on the operating expenses detailed above as a result of adjusted production volumes as detailed previously?

A. The impact on operating expenses, per Sch 1 Attachment B is an increase of $66 in expenses which is associated with an increase in electrical expenses related to the five-year average production volume being 3.47% greater than the 2019 TY production volume.

Q. Please describe Sch 3 and the pro forma made to it:

A. Sch 3 is used to develop the Company's Total Rate Base which is required to compute the revenue requirement following the DW 11-026 rate making methodology. The Schedule begins with the Company's 2019 TY Average Rate Base. The following pro formas were made to the 2019 TY Ave. Rate Base to create the Pro forma Test Year Rate Base:

(1) Plant in Service was adjusted per Sch 3 Attachment A as follows:

(a) A reduction of $1,063,241 in the 2019 TY Average rate base resulting from the elimination of the equity on the Company's books at the time of the acquisition by the City of Nashua.

(b) An increase in the 2019 TY Average rate base of $3,698 to reflect the difference between the 13-month average and 2019 TY rate base value for plant additions that occurred between 1/1/2019 and 12/31/2019.

(c) A reduction in 2019 TY Average rate base of $1,659 to reflect the difference between the 13-month average and 2019 YE rate base value for plant retirements that occurred between 1/1/2019 and 12/31/2019.

(2) Accumulated Depreciation was increased by $215 reflecting the net impact of adjusting depreciation expense for plant additions and retirements made between 1/1/2019 and 12/31/2019 to reflect a full year's depreciation expense per Sch 3 Attachment A, Exhibits 1 and 3.

(3) Working Capital was increased by $769 reflecting the 2019 pro forma increases to the 2019 TY operating expenses and a 12.33% Working Capital Rate per Sch 3 Attachment D.

(4) Other & Deferred Charges were reduced by $1,203,429 reflecting the elimination of the MARA per Sch 3 Attachment B.

Q. Does PAC plan to seek a Step Increase for plant invested in during 2020?

A. No. There were a limited number of investments made in PAC in 2020 and there is no long-term debt associated with those investments at present so PAC does not feel that filing for a Step increase is warranted.

Q. Does PAC plan to seek a Qualified Capital Project Adjustment (QCPAC) charge as part of this rate case?

A. No. Unlike Pennichuck Water Works and Pennichuck East Utility, the size and scope of PAC's annual capital investments also do not warrant a QCPAC mechanism, at this time. Over the next three years there are two major capital improvements that need to be completed in PAC: (1) the construction of a water storage tank and (2) improvements to the water treatment process to remove disinfection byproduct precursors. PAC will time these projects such that it will seek rates through the normal rate making process to pay for these capital improvements and any others made between rate cases. PAC has no plans in the near future (10 years) to replace its existing water mains as most are constructed of either ductile iron or lined cast iron water main. The majority of PAC's substandard water mains (steel, stove pipe, unlined cast iron) were replaced between 1998 and 2016. As of the end of 2020 about 14% or about 12,000 LF of PAC's water main is unlined cast iron. A replacement plan for this water main will be developed as part of the Company's asset management plan, but based on location, age, break history, colored water history and impacts on fire flows this pipe may not be replaced until decades into the future.

Q. What is the net change in plant, property and equipment invested in by the Company between the DW 13-130 rate case and this rate filing?

A. The Company's TY2102 Net Plant in Service (exclusive of CIAC) was $1,196,371 which its' TY 2019 Net Plant in Service (exclusive of CIAC) was $1,415,854 or an increase in Net Plant of $219,483. The total plant additions over this seven-year time frame were $409,258.

Q. What made up the plant additions between TY2012 and TY2019?

A. The plant additions were as follows:

1. **Account 304 – Structures – $8,640**

   New Shingled roof on Water Treatment Plant - $8,640. Replaced 20-year-old shingles.

2. **Account 311 – Pumping Equipment - $11,170**

   Replace failed WTP Backwash pump - $9,849

   Rebuild failed WTP Booster pump - $1,320

3. **Account 320 – Water Treatment Equipment - $10,061**

   Replace failed Filter Actuators - $10,061

4. **Account 331 – Distribution Mains - $268,077**

   Joy Street – Paving associated with the replacement of 1600+ LF of 8" Stove pipe water main with 8" DIPCL that occurred in 2012 and 2013 - $46,273

   Replace failed gate valves (6) – $19,761

   Broadway Street – replace 197 LF of 6 unlined cast iron watermain with 6" DIPCL - $39,132

   Fairview/Catamount Road project – Install parallel water main from WTP to Main Street. SRF funded project. - $162,912

5. **Account 333 – Water Services - $48,845**

A total of 15 services were replaced/installed new during this time frame. Ten of the services were replacements of existing main to stops and 4 were new main to stops of existing, single family residential properties.

6. Account 334 – Meters and Radios - $32,837

A total of 53 meters were exchanged during the meter periodic testing program. The meters being removed were brass with a high lead contest and were replaced with new, lead free brass meters. During the same time frame four new meters were installed for new customers. The total investment in meters was $28,242

A total of 40 radio meter readers failed during this time frame and were replaced with new radio readers. Four new radio meter readers were installed in conjunction with the four new meters installed above. The total investment in radios was $4,595

7. Account 335 – Hydrants - $20,331

A total of 5 failed hydrants were replaced during this time frame.

7. Account 346 – Communications Equipment - $9,298

Replace a failed SCADA computer which failed at the WTP and was replaced - $3,839

Cellular SCADA alarming was added to the WTP to allow SCADA from Pittsfield WTP to report to the Nashua WTP - $5,459

Q. How was the Rate of Return in the Puc 1604.06 Schedule 1A determined?

A. The rate of return was calculated in the Puc 1604.08 Schedule 1. Schedule 1 has one pro forma referenced in Note #4 which is the elimination of $1,063,241 of common equity associated with the elimination of the MARA.

Q. Please describe the 1604.08 Schedule 5.

A. The 1604.08 Schedule 5 reflects the long-term debt on the Company's books. The Company has two long term debt obligations:

1. An SRF loan associated with the Catamount Road project which was approved in PUC Order No. 25,888 in DW 16-035,
2. A long-term intercompany loan with Pennichuck Corporation that was approved in PUC Order No. 26,125 and in DW 18-033.

These two loans result in a blended effective debt rate of 3.25% and a pro forma 2020 principal and interest payment of $67,828. The pro forma reflects the changes to principal and interest payments made in 2019 and those that will be paid in 2020.

The debt instrument specific information is detailed in the columns between and including the columns titled "Term" to "Coupon Rate". The bottom line to this schedule is that the Company had $1,312,186 of outstanding debt as of 12/31/2019 with an average Funded "Effective Rate" of 3.25% which is the Component Cost Rate for the Company's Long-term Debt used in the calculation of the company's Overall Rate of Return. All the columns to the right of the "Coupon Rate" in Sch 5 of the 1604.08 schedules are new to this schedule and reflect the calculation of the Principal and Interest payments ("P&I") made on these bonds as follows:

(1) The P&I payments made by the Company during the 2019 TY in the amount of $67,791.

(2) The pro forma 2019 P&I payments in the amount of $67,828 reflecting the total annual P&I payments that the Company will need to make on the outstanding loan amounts in 2020 to fund the Company's Plant in Service as of 12/31/2019.

IV. <u>DISCUSSION OF OTHER OPERATIONAL MATTERS</u>

Q. Thank you for walking through the schedule details. Are there any operational issues you would like to discuss?

A. Yes, I would like to discuss the Company's request and calculations regarding the Rate Stabilization Funds ("RSF") it is seeking to undergird the Company's payment of its CBFRR obligation, its payment of Material Operating Expenses Revenue Requirement (MOERR) and its payment of outstanding Principal and Interest ("P&I").

Q. What are the requested levels for each RSF?

A. The Company is seeking to establish each RSF as follows:

CBFRR RSF - $13,000

MOERR RSF - $80,000

P&I 1.0 RSF - $7,000

Q. Please explain how the requested RSF levels were calculated?

A. The calculations used to establish the requested RSF levels can be found in DLW-Exhibit 1 of my testimony. Each RSF is calculated to provide sufficient cash to meet the Company's obligations over three years of reduced revenues resulting from wet weather as well as 3 years of inflation at 3.0% in regard to the Material Operating Expenses. These calculations detail a need for a total RSF amount of $166,000. The Company reduced the level of the MOERR RSF from $166,000 to $80,000 to reflect RSF funds available to PAC in the amount of $100,000 (See calculation of PAC's share of original DW 11-026 RSF fund on $5,000,000 on 1604.06 Schedule 1, Attachment A, Page 2.) The Company's requested level for each RSF based on its request to implement a Material Operating Expense Factor (MOEF) as part of this rate filing being approved.

Q. How did you determine the revenue reduction associated with three years of wet weather?

A. The Company compared the 5-year average metered sales against the worst year of metered sales during the past five years. This comparison results in a 6.42% reduction in consumption. In calculating the revenue impact of this reduced consumption, the Company adjusted the consumption related expenses by reducing them by 6.42%.

Q. How does the Company plan to fund the initial Rate Stabilization funds?

A. The Company plans to fund the $100,000 from its prorated share of the $5,000,000 RSF fund set up in DW 11-026, and as approved in Docket No. DW 16-806. If the MOEF sought by the Company is not approved as part of this rate filing, it would seek to establish a combined RSF account at the full calculated amount of $186,000. Mr. Goodhue's testimony addresses the options that could be considered by the Company to fund the $86,000 shortfall between available and desired RSF fund levels.

Q. Please explain the purpose of the MOEF?

A. The MOEF is a contingency factor applied to the approved Material Operating Revenues to ensure that the Company has sufficient cash flow from water sales under approved rates to pay for material operating expenses for the years between rate case test years. In the proposed rate structure, the Material Operating expense revenues are granted based upon a pro forma adjustment to the Test Year expenses for known and measurable changes to the Test Year expenses which occur within 12-months of the end of the test year. Given the normal progression of a rate case, which is typically filed 6 to 9 months after the TY. And, assuming that the new permanent rates take effect at the date of customer notice (typically between 7 to 11 months after the TY) the revenues granted in a rate case, without a MOEF, are only sufficient to cover expense increases that occurred within the first 12 months after the test year. The year after the filing (two years after the TY) the revenues being collected are only sufficient to cover the expenses for the year following the TY and if there are upward pressures on the material operating expenses, year over year, the revenues being collect two years after the TY would be insufficient to pay for expenses of that year. This shortage of revenues is further exacerbated during the 3rd year after the test year as the revenues being collected are still based upon the pro forma TY expenses which are now two-years old, resulting in a larger gap between revenues collected and current year expenses. The rate making mechanisms approved in DW 11-026 did not provide for this cash flow deficit, resulting in the Company having to borrow money in the form of short-term debt to pay for the expenses not covered by the collected revenues. There currently is no rate making mechanism which allows for the Company to collect revenues needed to pay-off the short term debt incurred between rate cases, which results from the inevitable deficit in cash created by the difference between approved revenues based on test year expenses and actual expenses incurred in future years between rate cases. The MOEF is a mechanism to provide the Company with the cash flow to go three years between rate cases without having to borrow money to cover increased operating expenses.

Q. Wasn't the purpose of the RSF funds to provide operating cash necessary to cover the shortfall between rate case granted revenues and increased operating expenses?

A. No. The RSF was designed to cover cash short falls created by differences in revenues and expenses that were either related to weather impacts or other economic factors outside the Company's control. Experience with both Pennichuck Water Works and

Pennichuck East Utilities show that when the cash from the RSF funds was used, in accordance with DW 11-026, DW 16-806, DW 19-084 and DW 17-128, that these funds were drawn down to $0 between rate cases and forced those Companies to borrow money on a short-term basis to bridge the cash gap between revenues that are fixed to a test year, compared with expenses that were growing in a compounded fashion from those approved for from the pro forma test year. The depletion of RSF funds, as investigated in DW 19-084, was so large that the replenishment of the funds to their imprest values over three years in the form of a deferred debit would have resulted in very large rate increases. The MOEF is designed to minimize the usage of RSF cash; limiting it to usage only to cover deficits created by a reduction in revenues associated with consumption levels that fall below those used to establish the test year revenues.

Q. **How was the proposed MOEF factor level of 6.0% determined?**

A. The proposed 6% MOEF, which would be recognized as part of the MOERR portion of allowed revenues, was designed to provide three years of material operating revenues that would equal three years of upward trending material operating expenses. In the PAC case, the calculation is detailed on DLW Exhibit 1 and is based upon a 3% per year change in operating expenses. The MOEF should result in the Company collecting more MOERR revenues in the first year outside the rate case than required, with those funds being deposited into the MOER RSF. In the second year outside of the rate case, it is projected that the MOERR revenues would essentially equal the MOE's for that year, and those funds would neither flow into or out of the MOER RSF during that year. In the third year outside of the rate case the projected MOERR revenues would not produce sufficient cash to pay for the increased operating expenses, and the shortfall would be covered by withdrawing cash from the MOER RSF, as deposited into the fund in year one outside the test year. In an ideal world, assuming that the consumption each year equaled the consumption used to develop the MOERR portion of allowed revenues, the RSF would be back to its originally established level at the end of three years which would also be the next Test Year for a rate case.

Q. Is the Company doing anything to promote conservation by its customers?

A. Yes. The Company continues to work with its customers with regards to sustainable conservation efforts through the use of semi-annual mailings promoting water saving fixtures, good water use habits and proper lawn irrigation practices. The Company is a member of the EPA WaterSense program and uses its website to direct customers to the EPA WaterSense program where there is an extension amount of information regarding water conservation and water saving fixtures.

Q. Is the Company continuing to see a reduction in base residential water use as a result of conservation efforts by its customers?

A. Yes. The average single-family water usage for the months of December through March, which reflects indoor water usage patterns, has shown a drop in average monthly usage of 3.9% between 2015 and 2019.

Q. Was a Cost of Service Study prepared as part of this case?

A. No. The last cost of service study was prepared as part of DW 08-052-090. Because there has been little change in the mix of customers, assets, and expenses since DW 08-052, the Company believes that preparing a Cost of Service Study, expected to cost between $40,000 to $50,000 is not justified and if required would have a very large impact on rate case expense without a corresponding benefit.

Q. Please summarize the impact of the Company's rate increase request by Customer Class.

A. The Tariff pages and Report of Proposed Changes sheets which detail the impact or the rate increase by customer class are found in Tabs 14 and 7 of the filing. The Company proposes to spread the propose rate increase uniformly across all customers classes.

Q. How does the Company plan to notify its customers of the pending rate increase?

A. In accordance with Puc 1203.02(c) and (d), the Company will be notifying its customers regarding the rate filing by providing a form of notice. The notice will be sent via a direct mailing to its customers, along with a FAQ document, as further explained in Mr. Goodhue's testimony. The notice will be sent to customer's prior to November 25, 2020. The direct mailing will also include information pointing customers to the Company's web page and to watch for a publication of notice regarding the suspension of the Company's rates and the date of the prehearing conference. Additionally, when the Commission issues the order to suspend the proposed tariffs and schedule a prehearing conference, the Company will provide notification in area newspaper(s) in addition to the individual customer notification.

Q. Do you have any other testimony to offer?

A. No.

Pennichuck East Utilities
DW17-128
Calculation of Rate Stabilization Funds

Pittsfield Aqueduct Company
MOEF and RSF Analysis

DLW Exhibit 1

Increase in Material Operating Expenses of 3.00% per year based on averge increase of these expenses per year between 2015 and 2019. See Table below for calculation.

PAC Proforma Test Year 2019

Proformed Revenue Requirement [1,2] - $ **865,590**

	CBFRR	Material Operating Expense Revenue Requirement, inclusive of MOEF	Operating Expense Revenue Requirment[6]	1.0 Debt Service Reveue Requirment	0.1 Debt Service Reveue Requirment
Revenue Requirement[2] -	$ 147,539	$ 634,448	$ 8,993	$ 67,828	$ 6,783
Percentage of Revenues -	17.04%	73.30%	1.04%	7.84%	0.78%
3 Years coverage -	$ 13,263	$ 166,468		$ 6,707	$ -
Requested Rate Stabilization Fund by Revenue Category with no MOEF [3,4] -	$ 13,000	$ 166,000	No Stabilization Fund	$ 7,000	No Stabilization Fund
Requested Rate Stabilization Fund with MOEF -	$ 13,000	$ 80,000		$ 7,000	
Based on largest negative variance from five year ave of -	6.42%				

Requested MOEF -	6.00%
Rate increase @ requested MOEFF -	11.18%
Annual MOEF Cash -	$ 35,912
Requested RSF funds with MOEF -	$ 186,000
Requested RSF funds with no MOEF -	$ 100,000

	2015 PAC Billed Revenue	2016 PAC Billed Revenue	2017 PAC Billed Revenue	2018 PAC Billed Revenue	2019 PAC Billed Revenue
Total Volumetric Charges	$ 340,641	$ 375,283	$ 368,712	$ 368,777	$ 358,687
Total Meter Charges	$ 210,961	$ 210,283	$ 212,466	$ 211,513	$ 211,560
Total Fire Protection - Public & Private (fixed)	$ 200,317	$ 200,363	$ 204,787	$ 204,871	$ 204,871
Total Billed Revenue	$ 751,919	$ 785,928	$ 785,965	$ 785,161	$ 775,118
% of Revenues that are variable	45.3%	47.8%	46.9%	47.0%	46.3%
% of Revenues that are fixed	54.7%	52.2%	53.1%	53.0%	53.7%

Calculation of MOER RSF, based on increase in MOE's over the past 5 years

	Increased Operating Expenses	Revenue Shortfall
Yr 1 -	$ 17,891	$ 18,986
Yr 2 -	$ 36,320	$ 18,986
Yr 3 -	$ 55,301	$ 18,986
	$ 109,512	$ 56,957
	Totals -	$ 166,468

Average percentage of revenues that were variable during the previous 5 years - 46.6%

Expense Type	2015 PEU Actual Variable Expenses	2016 PEU Actual Variable Expenses	2017 PEU Actual Variable Expenses	2018 PEU Actual Variable Expenses	2019 PEU Actual Variable Expenses
Electric	$ 5,121	$ 4,532	$ 5,013	$ 5,157	$ 8,032
Chemicals	$ 5,081	$ 6,461	$ 7,931	$ 7,025	$ 5,382
Total Variable Costs	$ 10,202	$ 10,993	$ 12,944	$ 12,182	$ 13,414
Variable Expenses as a Percent of Total Revenues	1.4%	1.4%	1.6%	1.6%	1.7%

	2015 Actual CCF's sold by PAC	2016 Actual CCF's sold by PAC	2017 Actual CCF's sold by PAC	2018 Actual CCF's sold by PAC	2019 Actual CCF's sold by PAC
Annual Metered Sales (CCF)	52,620	58,012	57,018	57,011	55,342
Percentage Variance between Current and High Consumption Year	-10.25%	0.00%	-1.74%	-1.76%	-4.82%
Average Consumption (CCF) over the past five years	56,001				
Variance between current and 5 Yr Ave Consumption	-6.42%	3.47%	1.78%	1.77%	-1.19%

Largest percentage reduction in volumetric sales at **PAC of** 6.42% over the past five years from the five year average of volumetric sales

Results in a Revenue loss of	$ 23,044
Results in an Operating Expense reduction of	$ 862
Results in an Operating Income reduction of	$ 22,182

Calculation of Annual Material Operating Expense Adjustment Percentage

	2015 PAC Material Operating Expenses	2016 PAC Material Operating Expenses	2017 PAC Material Operating Expenses	2018 PAC Material Operating Expenses	2019 PAC Material Operating Expenses	Increase in Operating Expense over the past four years	Average annual increase in Operating Expenses over the past four years	Increase in Operating Expense between 2018 and 2019
Production Expenses	$ 79,277	$ 89,625	$ 116,764	128,290	131,316	65.6%	13.45%	**2.36%**
Transmission & Distribution Expenses	$ 64,630	$ 70,985	$ 82,996	73,811	61,179	-5.3%	-1.36%	**-17.11%**
Customer Acct & Collection Exp	$ 13,846	$ 14,814	$ 18,126	12,552	15,594	12.6%	3.02%	**24.24%**
Administrative & General Expense	$ 31,900	$ 17,877	$ 19,654	23,978	26,789	-16.0%	-4.27%	**11.72%**
Inter Div Management Fee	$ 133,199	$ 157,305	$ 172,080	183,320	174,177	30.8%	6.94%	**-4.99%**
Amortization Expense	$ 3,583	$ 3,161	$ 3,088	3,088	3,086	-13.9%	-3.66%	**-0.06%**
Property Taxes	$ 161,883	$ 238,923	$ 211,656	210,064	188,950	16.7%	3.94%	**-10.05%**
Total Annual MOERR Expenses	$ 488,318	$ 592,690	$ 624,364	$ 635,103	$ 601,091	23.1%	5.33%	**-5.36%**
Less change in variable expenses over prior year	10,202	$ 10,993	$ 12,944	$ 12,182	$ 13,414	31.5%	7.08%	**10.11%**
Total Annual MOERR Expenses less variable expenses	478,116	$ 581,697	$ 611,420	$ 622,921	$ 587,677	22.9%	5.29%	**-5.66%**

Total Percentage Increase in Fixed Material Operating Expenses over the past four years - 22.92%
Average annual increase in Material Operating expenses over the past four years - 5.29%
Average annual increase in Material Operating expenses over the past three years - 0.34%

Notes:
1. Based on Debt Service Multiplier of 1.10 per Sch A of 1604.06 schedules.
2. Revenue requirements per Sch A of 1604.06 schedules
3. Requested Rate Stabilization fund for Operating Expense and P & I Coverage each have a contingency of 0% based on % of PAC revenues (2012 Case) to % of all three regulated utilities revenues (2012 TY Cases) or $ 100,000
4. PAC share of the $5,000,000 RSF for distribution to the RSF, MOERSF and the P&IRSF is[5] 2.11%
5. Calculation of RSF Pecentage based on Revenue requirements from DW13-126, 13-128 and 13-130
6. For Calculation of Operating Expense Requirement see DLW Exhibit 1.1

PWW Revenue Requirment -	$ 27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -	$ 6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -	$ 745,186	per DW13-128 Settlement Agreement
Total Utility Revenue Requirement -	$ 35,347,661	

DLW Exhibit 1.1

Pittsfield Aqueduct Company
Non Material Operating Expenses as defined in DW17-128
For the Twelve Months Ended December 31, 2019

			January	February	March	April	May	June	July	August	Septembe	October	Novembe	December		2019 Totals
921002	921002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
921003	921003	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
921004	921004	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
923000	923000	OUTSIDE SERVICES	-	-	-	1	-	-	8,971	-	-	-	-	-	**8,972.36**	8,972.36
926001	926001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926500	926500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926501	926501	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926502	926502	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926505	926505	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926600	926600	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926610	926610	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
930100	930100	#N/A	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
930101	930101	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
930200	930200	PUBLIC RELATIONS	-	-	-	-	-	-	-	-	-	-	-	20	**20.18**	20.18
930300	930300	MEALS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
930410	930410	CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
															Total of Non RSF backed O&M Expenses -	**$ 8,992.54**

TAB 11

Petition for Further Modification of Ratemaking Structure

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Docket No. DW 20-153

PITTSFIELD AQUEDUCT COMPANY, INC.

Permanent Rate Proceeding

PETITION FOR FURTHER MODIFICATION TO RATEMAKING STRUCTURE

Pittsfield Aqueduct Company, Inc. (PAC), in accordance with N.H. Admin. Rule Puc 203.06 (relative to petitions) and N.H. Rev. Stat. Ann. 378:28 (relative to permanent rates), and N.H. Rev. Stat. Ann. 365:28 (relative to modification of orders) hereby requests that the New Hampshire Public Utilities Commission (Commission) grant further modifications to PAC's ratemaking methodology, as described below. In support of its petition, PAC states:

Background

1. On September 17, 2020 PAC filed its notice of intent to file rate schedules, pursuant to N.H. Code Admin. R. PART Puc 1604.05. Pursuant to Puc 1604.05, utilities must give the Commission 30-days notice of its rate changes and must file any full rate case within sixty days of filing the notice of intent. The thirty-day filing window commenced October 17, 2020, however, because that date fell on a day that the Commission is not open for business, pursuant to Puc 202.03 (computation of time), the next business day for the thirty-day filing window to commence was October 19, 2020. Sixty days from the filing of the notice of intent is Monday, November 16, 2020.

2. Contemporaneous with this petition and pursuant to PART Puc 1604, PAC is filing its supportive testimony, filing requirement schedules, rate of return schedules, full rate case schedules, tariffs, and rate case expense summary prior to the November 16, 2020 deadline. Pursuant to RSA 378:1 and RSA 378:3, the rate filing sets in motion PAC's increase in its

permanent rates after the thirty day's notice. Those rates are based on PAC's calculation of its revenue requirement.

History of Evolution of Ratemaking Methodology for Pennichuck Utilities

3. In Order No. 25,292 (November 23, 2011), in Docket No. DW 11-026, the Commission approved the acquisition of PAC's parent company, Pennichuck Corporation, by the City of Nashua (City). That acquisition was completed on January 25, 2012, whereby Pennichuck Corporation ceased to be a publicly traded company. The City became Pennichuck Corporation's sole shareholder with a "limitation on Nashua's ability to draw dividends or other distributions from Pennichuck Corporation" (Order No. 25,292 at page 45). That limitation means there is no ability to sell stock and Pennichuck Corporation and its affiliates no longer have access to the equity markets for financing; they only have access to debt.

4. As part of the acquisition, the Commission approved a modified ratemaking structure for PAC, Pennichuck East Utility, Inc. (PEU), and Pennichuck Water Works, Inc. (PWW). That modification enabled those regulated utilities to earn a reasonable return on invested assets through a ratemaking methodology that produced just and reasonable customer rates, as required under *FPC v. Hope Natural Gas*, 320 U.S. 591, 602-603 (1944). That ratemaking structure included a City Bond Fixed Revenue Requirement (CBFRR) component which allowed the utilities to repay the City's acquisition bonds and Municipal Acquisition Regulatory Asset (MARA)[1]. The latter was an equity-related item approved in the revenue requirement and represented the excess of the City's purchase price over the book value of the assets of Pennichuck Corporation. The purchase price was equal to the price the City paid for the shares including all transaction and debt financing cost plus all of the existing liabilities assumed. This

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[1] It is relevant to note that once the City bond is fully repaid, the CBFRR will be reduced to zero. This is estimated to occur in the year ---.

aggregate MARA is allocated among the Pennichuck Corporation subsidiaries, including the regulated utilities PAC, PEU, and PWW. In addition, the ratemaking structure included a $5,000,000.00 Rate Stabilization Fund (RSF) designed to provide assurance to creditors that Pennichuck Corporation's regulated utilities would meet the City's bond repayment requirements. *See Joint Petition of Nashua, Pennichuck Corporation, et al*, Order No. 25,292 at 30 (November 23, 2011) ("the fund is intended to provide holders of the City Acquisition Bonds with reasonable assurances of the available cash to be used to pay debt service on the City Acquisition Bonds, similar to a debt service reserve fund, and will hence facilitate Nashua's ability to borrow funds at reasonable interest rates, which will directly benefit customers in the form of a lower cost of capital").

5. In Docket Nos. DW 13-128, DW 13-126, and DW 13-130, the Commission modified this unique ratemaking structure in PAC, PEU, and PWW's rate cases. In those proceedings, the Commission established, among other things, the value of equity-related items and determined how the return on equity would be calculated. See Order No. 25,695 for PAC dated July 22, 2014; Order No. 25,696 for PEU dated July 25, 2014; and Order No. 25,693 for PWW dated July 15, 2014. The Commission also approved other fine tunings of the revenue requirement by approving the settling parties' resolution of what constituted non-revenue producing assets, the amount of eminent domain costs, and final actual total of the MARA. *Id.*

6. In Docket Nos. DW 16-806 for PWW's general rate proceeding and DW 17-128 for PEU's general rate proceeding, and with the aid of additional years of experience with the unique ratemaking structure, the Commission again approved further modifications. In particular, the Commission approved operating expense revenue requirement components: (a) Material Operating Expense Revenue Requirement (MOERR); and (b) Non-material Operating Expense

Revenue Requirement (NOERR)[2]. The Commission approved debt service revenue requirement components: (a) Debt Service Revenue Requirement-1.0 (DSRR-1.0), and (b) Debt Service Revenue Requirement-0.1 (DSRR-0.1)[3]. Similar to the rate stabilization fund for the CBFRR, the Commission approved rate stabilization funds for the MOERR (MOERR-RSF) and DSRR-1.0 (DSRR-1.0-RSF). It is relevant to note that the creation of these additional RSFs involved reallocating the original $5,000,000.00 impress value of the CBFRR RSF among PAC, PEU, and PWW as well as allocating to the newly-created RSFs.[4] See Order No. 26,070 for PWW dated November 7, 2017 and Order No. 26,179 for PEU dated October 4, 2018. The Commission also approved a five-year average test year period for PEU and PWW. *Id.* The ratemaking modifications were designed to provide: 1) stability to customer rates, 2) assurance to creditors of PEU and PWW's ability to effectively meet cash obligations, 3) sufficient cash-flow coverage for PEU and PWW's operating needs, and 4) enhancement to PWW's credit rating. All of which were anticipated to increase the ability to access the credit markets and obtain lower-cost debt financing.

7. In Docket No. DW 19-084, the Commission approved additional changes to the ratemaking structure. This time, it approved a Material Operating Expense Factor (MOEF) to

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[2] The MOERR consists of all of the operating expenses included in an Operating Expense Revenue Requirement (OERR) with the exception of those expenses specified as Non-Material Operating Expense Revenue Requirement items.

[3] The DSRR-0.1 is intended to provide a 10% over-cover for annual debt service obligations in order to satisfy debt lending requirements.

[4] Initially, $1.08 million of the original $5 million RSF was allocated to PEU and PAC ($980,000 of which was subsequently allocated to PEU in Docket No. DW 17-128) to assist those utilities in meeting their cash needs. The remaining $3.92 million of the original RSF retained by PWW was then apportioned among three reserve funds to provide additional coverage for the specific cash flow needs in its modified revenue requirement: (1) CBFRR-RSF (PWW's obligation relative to the City's acquisition bond) – $680,000; (2) MOERR-RSF (PWW's material operating expenses) – $2,850,000; and (3) DSRR-1.0-RSF (PWW's debt service requirements) – $390,000. The re-apportionment of PWW's RSF funds was specifically designed to provide stability to customer rates even under adverse conditions, as it could draw on those funds to meet its cash obligations under such conditions.

the MOERR[5]. See Order No. 26,383 for PWW dated July 24, 2020. As is discussed more fully in the testimony of Mr. Larry Goodhue, the MOEF was necessary to signal to rating agencies that PWW will have the necessary cash coverage to meet its operating expenses. The Commission also approved other changes to the ratemaking structure. They included: (1) modification to the calculation of the 5-year average for revenues[6]; (2) inclusion of actual NHBET cash payment in revenue requirement[7]; (3) re-prioritization of usage of available DSRR-0.1 funds; (4) recovery of State Revolvoing Loan Fund and Drinking Water Groundwater Trust Fund debt issuance costs; and (5) re-establishment of imprest levels of RSF accounts retention of a previously approved reconciliation mechanism.

8. Finally, because PAC's revenues largely met its expenses, PAC did not seek a rate increase in 2016/2017 as PWW and PEU did. It has not had a full general rate case since the 2013 docket. Therefore, the modifications to PWW and PEU's ratemaking structure in Docket Nos. DW 16-806 and DW 17-128, as well as the latest modifications in Docket No. DW 19-084, have not yet flowed to PAC. PAC seeks to adopt these modifications in the instant rate filing.

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[5] The intended purpose of the MOEF is to sufficiently enhance the MOERR portion of allowed revenues to better enable adequate cash flow coverage between rate cases for increases in material operating expenses. The MOEF helps maintain the MOERR-RSF at its established imprest level. Thus, in each rate proceeding, the MOEF would be re-established in conjunction with the MOERR-RSF. It is anticipated that doing so would enable the MOERR-RSF to become a more effective buffer against unanticipated revenue fluctuations due to weather as well as the impact of regulatory lag experienced by the Company, which, for PWW, is exacerbated by the fact that it is a debt-only financed utility.

[6] In this modification, an Atypical Year is defined as one in which that year's water consumption either exceeds or falls short of the calculated trailing 5-year average of water consumption by more than 15%. When an Atypical Year occurs in the 5-year average, the Atypical Year's data is replaced with data from the next most recent preceding typical operating year's data. The underlying trailing 5-year average, however, is calculated with the Atypical Year before assessing whether there is an Atypical Year.

[7] This modification addresses recent Federal tax law changes that result in a more rapid exhaustion of available Net Operating Loss (NOL) carryforwards that offset current taxable income. Additionally, the regulated utilities incur actual cash payments relative to both the corporate NH Business Profits Tax (BPT) and NH Business Enterprise Tax (BET), regardless of NOL carryforwards. The modification allowed PWW to include in the MOERR the actual cash cost of taxes for the NHBET.

Why the Ratemaking Changes are Necessary for PAC

9. The reasons for the modifications to PAC's ratemaking structure are detailed in the testimonies of Mr. Larry Goodhue and Mr. Donald Ware and mirror concerns expressed by PWW and PEU in their above-noted rate cases. As the Commission is aware, the Pennichuck Corporation's regulated utilities are heavily debt-weighted in their capital structure. Although this form of capital is cheaper than equity and, ultimately, benefits ratepayers, the major credit rating agencies have been cautious as the regulated utilites navigate the new capital structure and ratemaking methodologies. In discussions with the Company's investment bankers about these modifications to the ratemaking structure, the Company concluded that the modifications would increase access to the credit markets, and most likely at an enhanced credit ratings, as well as expand access to lower cost debt, which in turn benefits customers. In general, if lenders have reasonable expectations that future rates will be more directly related to the Company's long-term, post-acquisition debt-based capital requirements and create sustainable cash coverage, then they will lend to the Company and its Parent on more beneficial terms. Because PAC obtains much of its financing as inter-company loans, the benefit of the lower credit rating PAC's affiliates obtain also flows through to PAC and its customers. Therefore, the same arguments the companies made for PWW and PEU's adoption of the modifications to the ratemaking structure also apply to PAC.

10. The need for the requested ratemaking structure modifications is readily illustrated in PAC's debt schedules. See Puc 1604.08(c) schedules at rate filing Tab 13 (Schedule 5 and Schedule 6). PAC has $1.1 million in outstanding intercompany loans. As explained by Messrs. Goodhue and Ware, PAC presently lacks a revenue mechanism to enable it to repay this intercompany debt. This lack of cash flow is analogous to PWW's situation explained in Docket

No. DW 19-084 where PWW experienced a significant draw-down of its operating expense rate stabilization fund. Although PAC does not have a MOERR and associated RSF, its large intercompany loan balance reflects the same cash flow connundrum.

11. To address the cash coverage concerns and the intercompany loan issue, as well as to bring uniformity as to how the revenue requirements are calculated for all Pennichuck Corporation regulated utilities (as was originally envisioned in the acquisition docket, DW 11-026, and in the 2013 rate cases), PAC requests that the Commission modify PAC's present ratemaking structure to include:

(1) a MOERR, MOEF, and associated RSF;
(2) a NOERR;
(3) a DSRR-1.0 and associated RSF;
(4) a DSRR-0.1;
(5) a five-year average test period;
(6) actual NH Business Enterprise Tax cash payments in the revenue requirement;
(7) prioritization of usage of available DSRR-0.1 funds;
(8) recovery of State Revolvoing Loan Fund and Drinking Water Groundwater Trust Fund debt issuance costs; and
(9) re-establishment of imprest levels of RSF accounts retention of a previously approved reconciliation mechanism.

Conclusion

12. In light of PAC's revenue deficiency, its need for adequate and sustainable cash flow, PAC respectfully requests the Commission allow it to modify its ratemaking structure with the above-described targeted changes and charge rates based on that ratemaking structure.

WHEREFORE, Pittsfield Aqueduct Company, Inc. respectfully requests the Commission:

A. Grant this petition for further modification of PAC's ratemaking structure; and

B. Grant such other relief as is just and equitable.

Respectfully submitted,

PITTSFIELD AQUEDUCT COMPANY, INC.

By its Attorneys,

N.H. Brown Law, PLLC

Date: November 16, 2020 By: Marcia A Brown

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NH Brown Law, PLLC
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Certificate of Service

I hereby certify that on this day, a copy of this petition has been emailed to the Docket-Related Service List for this proceeding.

Date: November 16, 2020 Marcia A Brown

Marcia A. Brown, Esq.

TAB 12

1604.06 and 1604.07 Filing Requirement Schedules

PITTSFIELD AQUEDUCT COMPANY, INC.
COMPUTATION OF REVENUE DEFICIENCY
For the Twelve Months Ended December 31, 2019

Schedule A
Perm-Conventional

	TEST YEAR	PRO FORMA ADJUSTMENTS	PRO FORMA TEST YEAR
Consolidated Rate Base (Sch 3)	$ 3,234,472	$ (2,263,803)	$ 970,669
RATE of Return (1)	3.81%		3.81%
Income Required	$ 123,107		$ 36,945
Adjusted Net Operating Income (Sch 1)	$ 46,620	$ (47,800)	$ (1,180)
Deficiency	$ 76,487		$ 35,765
Tax Factor (2)	72.92%		72.92%
Revenue Deficiency	$ 104,896		$ 49,048
Water Revenues	$ 771,874	$ (147,539)	$ 624,336
Add: City Bond Fixed Revenue Requirement	$ -		$ 147,539
Water Revenues with CBFRR	$ 771,874		$ 771,874
Proposed Revenue Inc.	13.59%		6.35%
New Revenue Levels	$ 876,770		$ 820,922

Notes:
(1) See Schedule 1 in the 1604.08 Schedules
(2) See Tax Factor Tab in 1604.06 schedules

Pittsfield Aqueduct Company
Schedule A
Computation of Revenue Deficiency
For The Twelve Months Ended December 31, 2019

Schedule A
Ptroposed

	12 Months Ending 12/31/19		PRO FORMA Adjustments to 2019 Test Year		PRO FORMA 12 Months Ending 12/31/19	Perm Rate PRO FORMA Adjustments based on FIVE YEAR AVE	Perm Rate Based on Five Year Ave
City Bond Fixed Revenue Requirement (CBFRR)	$ 147,539	(1)	$ -		$ 147,539	$ -	$ 147,539
Material Operating Expense Revenue Requirement (MOERR)	$ 605,988	(2)	$ (7,518)	(4)	$ 598,470	$ 66	$ 598,536
Material Operating Expense Factor (MOEF)	1.0				1.0		1.060
Material Operating Expense Revenue Requirement (MOERR)	$ 605,988				$ 598,470		$ 634,448
Non Material Operating Expense Revenue Requirement (NOERR)	$ 8,993		$ -		$ 8,993	$ -	$ 8,993
Debt Service Revenue Requirement (DSRR 1.0)	$ 67,791	(3)	$ 36		$ 67,828	$ -	$ 67,828
Principal and Interest Coverage Requirement	1.00		1.00		1.00	-	1.10
Total Debt Service Requirement with 0.1 DSRR included	$ 67,791		$ 36		$ 67,828	$ -	$ 74,611
Revenue Requirement	$ 830,311		$ (7,482)		$ 813,837	$ 66	$ 865,590
Less Other Operating Revenues	$ 2,663		$ -		$ 2,663	$ -	$ 2,663
Revenues required from Customer Classes	$ 827,648		$ (7,482)		$ 811,174	$ 66	$ 862,927
Total Current Revenues, exclusive of other revenues and excluding CBFRR	$ 624,336		$ -		$ 624,336	$ 4,270	$ 628,606
Add: City Bond Fixed Revenue Requirement	$ 147,539		$ -		$ 147,539	$ -	$ 147,539
Current Water Revenues with CBFRR	$ 771,874		$ -		$ 771,874	$ 4,270	$ 776,144
Proposed Percent Revenue Increase	7.23%				5.09%		11.18%

Principal and Interest Coverage Requirement - 1.10

Notes:
(1) The CBFRR includes the revenues necessary to repay the City Bond per 1604.06 Sch 1 Attach A Pg 2
(2) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, and Amortization Expense from 1604.06 Sch 1
(3) Annual Principal and Interest payments for debt associated with all plant in service as of 12/31/2019 per 1604.08, Schedule 5
(4) 2019 Test Year Proforma per 1604.06 Sch 1
(5) Annual Principal and Interest payments for repayment of intercompany debt as of 12/31/2019 per 1604.08, Schedule 5

Pittsfield Aqueduct Company
Overall Rate of Return
For the Twelve Months Ended December 31, 2019

Rate of Return - Sch 1A

Capital Component		Amount	Ratio	Rate		Average Cost Rate
Long-term Debt	$	1,312,186	64.58%	3.25%	(2)	2.10%
Intercompany Debt (3)	$	14,674	0.72%	3.31%		0.02%
Preferred Stock	$	-	0.00%	0.00%		0.00%
Common Equity	$	705,066	34.70%	4.85%	(1)	1.68%
Overall Rate of Return	$	2,031,926	100.00%			**3.81%**

Notes:

(1) The return on equity based on Order 25,292 in DW 11-026 is as follows:

Average 2019 30 year Treasury bonds	1.85%
Plus 3.0%	3.00%
Total	4.85%

(2) Per Order 25,230 in DW 10-091, the interest rate as reflected on Schedules 5 is calculated on debt net of debt issuance costs

PITTSFIELD AQUEDUCT COMPANY, INC.
OPERATING INCOME STATEMENT
For the Twelve Months Ended December 31, 2019

Schedule 1
Perm-Conventional

	Account Number	TWELVE MONTHS 12/31/19	PRO FORMA ADJUSTMENTS		PRO FORMA 12 MONTHS 12/31/19	TWELVE MONTHS 12/31/18	TWELVE MONTHS 12/31/17
Water Sales	461 & 462	$ 771,874	$ (147,539)	(8)	$ 624,336	$ 788,388	$ 788,657
Other Operating Revenue	471	2,663	-		2,663	3,171	3,435
Total Revenues		774,537	(147,539)		626,999	791,559	792,092
Production Expenses	601 to 652	131,316	1,537	(1)	132,853	128,290	116,764
Transmission & Distribution Expense	660 to 678	61,179	3,117	(2)	64,296	73,811	82,996
Customer Acct & Collection Exp	902 to 904	15,594	(422)	(3)	15,173	12,552	18,126
Administrative & General Expense	920 to 950	26,789	623	(2)	27,413	23,978	19,654
Inter Div Management Fee	930	174,537	1,385	(3)	175,922	183,320	172,080
Total Operating Expense		409,416	6,241		415,657	421,952	409,621
Depreciation Exp/Acq Adj (Credit)	403	101,572	(27,111)	(4)	74,462	101,836	103,390
Amortization Expense: CIAC	405	(22,985)	-		(22,985)	(22,986)	(23,072)
Amortization Expense	407	37,435	(34,349)	(5)	3,086	36,630	35,923
Property Taxes	408.1	187,692	(230)	(6)	187,462	181,659	211,656
Income Tax	409 to 410	14,787	(44,289)	(7)	(29,502)	110,837	17,053
Total Operating Deductions		318,501	(105,979)		212,522	407,975	344,950
Net Operating Income		$ 46,620	$ (47,800)		$ (1,180)	$ (38,368)	$ 37,521

Notes:
(1) adjust production expenses for personnel and salary increases and electricity per Schedule 1, Attachment B
(2) adjust distribution expenses for personnel and salary increases per Schedule 1, Attachment C
(3) adjust for customer account and collection costs per Schedule 1, Attachment D
(4) adjust depreciation for additions/deletions to plant assets and the elimination of equity related assets per Schedule 1, Attachment K
(5) adjust amortization expenses for the elimination of the amortization of the acquisition premium.
(6) adjust property taxes for additions/deletions to plant assets and valuation adjustment per Schedule 1, Attachment G
(7) reflect income tax effect on proforma adjustments calculated per Schedule 1, Attachment L
(8) adjust revenue to eliminate City Bond Fixed Revene Requirement (CBFRR) per Schedule 1, Attachment A, Page 1

PITTSFIELD AQUEDUCT COMPANY
OPERATING INCOME STATEMENT
For the Twelve Months Ended December 31, 2019

Schedule 1
Proposed

	Account Number	TWELVE MONTHS 12/31/19	PRO FORMA Adjustments to Test Year		PRO FORMA 12 MONTHS 12/31/19	PRO FORMA Adjustments based on Five Year Ave		Perm Rate Based on Five Year Ave	TWELVE MONTHS 12/31/18	TWELVE MONTHS 12/31/17
Water Sales	460 to 462	$ 771,874	$ -		$ 771,874	$ 4,270	(9)	$ 776,144	$ 788,388	$ 788,657
Other Operating Revenue	471	2,663	-		2,663			$ 2,663	3,171	3,435
Total Revenues		774,537	-		774,537	4,270	-	778,807	791,559	3,435
Operating Expenses										
Production Expenses	601 to 652	131,316	1,537	(1)	132,853	66	(10)	132,919	128,290	116,764
Transmission & Distribution Expenses	660 to 678	61,179	3,117	(2)	64,296	-		64,296	73,811	82,996
Customer Acct & Collection Exp	902 to 904	15,594	(422)	(3)	15,173			15,173	12,552	18,126
Administrative & General Expense	920 to 950	26,789	623	(4)	27,413			27,413	23,978	19,654
Inter Div Management Fee	930	174,537	1,385	(5)	175,922			175,922	183,320	172,080
Amortization Expense	407	3,086	-	(6)	3,086			3,086	3,088	3,088
Property Taxes	408.1	187,692	(230)	(7)	187,462			187,462	181,659	211,656
Income Tax	409 to 410	14,787	(13,529)	(8)	1,258	-		1,258	110,837	17,053
Total Operating Expense		614,981	(7,518)		607,463	66		607,529	717,535	641,418

Notes:
(1) adjust production expenses for personnel and salary increases and electricity per Schedule 1, Attachment B
(2) adjust distribution expenses for personnel and salary increases per Schedule 1, Attachment C
(3) adjust for customer account and collection costs per Schedule 1, Attachment D
(4) adjust for Admin & General expenses per Schedule 1, Attachment E
(5) adjust Management Fees Schedule 1 Attachment F
(6) adjust amortization expenses for additions/deletions and eliminations to deferred charges per Schedule 1, Attachment H
(7) adjust property taxes for additions/deletions to plant assets and valuation adjustment per Schedule 1, Attachment G
(8) reflect income tax effect on proforma adjustments calculated per Schedule 1, Attachment J
(9) normailze test year revenues to reflect 5 Year Ave slaes per Schedule 1C
(10) normailze test year production expenses to reflect of the 5 Year Ave per Schedule 1, Attachment B

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Total Revenues
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment A
Page 1

I Water Sales

A. Per Order 25,292 in DW 11-026, the following pro forma adjustment elimates the annualized water sales associated with the City Bond Fixed Revenue Requirement (CBFRR). Includes PAC payment for its share of the $5,000,000 Rate Stabilization Fund per Sch 1 Attach A Pg 2
Therefore:

	$	**(147,539)**
TOTAL WATER SALES PRO FORMA:	**$**	**(147,539)**

Pittsfield Aqueduct Company
PRO FORMA Adjustments to Revenue Requirement
Calculation of PAC's share of City Bond Fixed Revenue Requirement

Schedule 1
Attachment A
Page 2

Revenue

1 To recognize adjustment of fixed annual revenue requirement to meet City Bond obligation.

Total City Bond	$	150,570,000	
Bond Interest Rate		4.09%	
Bond Period		30	yrs.

Total City Bond	$	150,570,000	
Less Rate Stabilization fund		$5,000,000	
Amount of City Bond to be prorated between Utilities CBFRR	$	145,570,000	
PAC Share of CBFRR		1.66%	
PAC Prorata share		$2,423,594	
Add back PAC Pro Rata Share of Rate Stabilization Reserve	$	100,000	
Total PAC Pro Rata Share for CBFRR/MARA	$	2,523,594	
Bond Interest Rate		4.09%	
Bond Period		30	yrs.
PAC CBFRR Revenue Requirement	**$**	**147,539**	

Notes:
(1) Pro Rata Calculation as follows:

PWW & Southwood Equity (12/31/2011) **(2)**	$	56,442,675	88.12%
PEU Equity (12/31/2011)	$	6,540,063	10.21%
PAC Equity (12/31/2011)	$	1,066,353	1.66%
	$	64,049,091	100.00%

5. Calculation of RSF Pecentage based on Revenue requirements from DW13-126, 13-128 and 13-130

RSF amount funded by City Bond -	$	5,000,000	
PWW Revenue Requirment -		$27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -		$6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -		$745,186	per DW13-128 Settlement Agreement
PAC Share of RSF as a percentage -		2.11%	
PAC Share of RSF in $$ -	$	100,000	

(2) Consists of Equity as of 12/31/2011 as follows:

PWW	$	54,395,626
Southwood	$	2,047,049
Total	$	56,442,675

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Production Expenses
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment B

	Test Year Proformas	Proformas based on 5 Year Ave.
I Union Contract		
A. In 2018, the Company signed a three year contract with the United Steelworkers Union which called for a 3.45% increase 1/1/2020. To calculate the pro forma adjustments for Production union payroll, the payroll data was extracted from the work order detail report for the year 2019. (See Schedule 1B)		

	Wage increase granted on 01/1/20	1,010
Benefits	66.20%	668
		$ 1,678

	Test Year Proformas	Proformas based on 5 Year Ave.
Therefore:	**$ 1,678**	
II Operating and Maintenance Expenses:		
B. During 2019, the Company negotiated a new electricity supply charge rate (per kilowatt hour) effective November 1, 2019 for G and GV Accounts The calculation of the pro forma adjustment is as follows:		

2019 Total KWH	2019 Purchased Power Total $$	2019 Supply Rate	2020 Supply Rate	Decrease
31,192	$ 8,032	$ 0.07403	$ 0.06950	$ (141)

	Test Year Proformas	Proformas based on 5 Year Ave.
Therefore:	**$ (141)**	
C. Adjustment to Electric supply charge associated with 5 Year Average Flows		

2019 Total KWH	% Change from 2019 TY to 5 Yr Ave.	Change in KWH	2020 KWH Rate	Change in Electric Supply Costs
31,192	3.47%	1,081	0.06095	$ 66

	Test Year Proformas	Proformas based on 5 Year Ave.
Therefore:		**$ 66**
TOTAL PRODUCTION EXPENSES PRO FORMA:	**$ 1,537**	**$ 66**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Transmission and Distribution Expenses
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment C

I Union Contract

A. In 2019, the Company signed a two year contract with the United Steelworkers Union which called for a 3.45% increase 1/1/2020.
To calculate the pro forma adjustments for Distribution union payroll, the payroll data was extracted from the work order detail report for the year 2019. (See Schedule Union 1B)

	Wage increase granted on 01/1/20	1,875		
Benefits	66.20%	1,241		
		$ 3,117		
Therefore:			**$**	**3,117**
TOTAL TRANSMISSION AND DISTRIBUTION EXPENSES PRO FORMA:			**$**	**3,117**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Customer Account and Collection Expense
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment D

I Customer Account and Collection

A. In October of 2020 the cost of bill and notice processing decreased/increased in accordance with the Company's vendor change from Curtis1000 to DMM. Theses cost increases were partially offset by a decrease in postage. The following pro forma adjustment annualizes the impact on costs as follows:

Activity	Quantity[1]	2020 Rate	2019 Rate	Rate Change	Pro Forma	
Bill (Paper, Print and Insert)	7,534	$ 0.1250	$ 0.1400	$ (0.02)	$ (113)	
Notice (Paper, Print and Insert)	876	$ 0.3400	$ 0.1400	$ 0.20	$ 175	
Bill Envelopes	8,410	$ 0.0270	$ 0.0375	$ (0.01)	$ (88)	
Bill Return Envelope	8,410	$ 0.0235	$ 0.0339	$ (0.01)	$ (87)	
					$ (113)	
Bill Postage	7,534	$ 0.4090	$ 0.4500	$ (0.04)	$ (309)	
Notice Postage	876	$ 0.4500	$ 0.4500	$ -	$ -	
					$ (309)	
			Total Decrease in expenses		$ (422)	
Therefore:						$ (422)

Total Customer Account and Collection Pro Forma: $ (422)

1. Number of bills processed in 2019

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Administrative and General Expense
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment E

I Insurance

A. In 2020 the Company's insurance expense is increased.
The pro forma adjustment to reflect the increased costs is as follows:

2019 Insurance Expense	$	10,654		
2020 Insurance Expense	$	11,196		
	$	542		
Therefore:			**$**	**542**

II Regulatory Commission Expense

A In 2019, the Company recorded regulatory commission expense based on quarterly assessments. Based on the latest assessment, the Company expects to incur higher levels in 2020 as follows:

2019 Regulatory Expense	$	2,985		
2020 NHPUC Annual Assessment	$	3,066		
Therefore:	$	81		
			$	**81**
TOTAL ADMINISTRATIVE & GENERAL EXPENSE PRO FORMA:			**$**	**623**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Management Fee Expense
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment F

I Management Fee Allocated to Affiliates (Rule 1601.01, Section 26)

A In the test year, PWW adjusted compensation for non-union salary & wages that occurred on April 1, 2020 per Sch Non Union 1B. A portion of the increases will flow through the management fee (1604.01 Section 26) and be allocated to PAC including benefits, as follows:

Non Union Payroll Pro Forma		$	(88,648)		
Benefits Pro Forma		$	(45,432)		
Total Pro Forma		$	(134,080)		
% Allocated to PAC	1.42%	$	(1,904)		
Therefore:				**$**	**(1,904)**

B. Under the current lease at Manchester Street, lease payments remained constant. The CAM charges increased in 2019. The following pro forma adjustment annualizes the current lease payments:

2020 Estimated Expense		$	335,532		
2019 Lease Expense		$	338,567		
Increase in Lease Expense		$	(3,035)		
% Allocated to PAC	1.42%	$	(43)		
Therefore:				**$**	**(43)**

C. In 2020, the Company is expecting a increase in pension expenses and health retirement plans based on actuarial valuation. The pro forma adjustment to reflect the increased costs is as follows:

			Health Retirement		
2020 Estimated Expense			353,640.00		
2019 Actual Expense			331,492.85		
Increased Expense		$	22,147		
% Allocated to PAC	1.42%	$	314		
Therefore:				**$**	**314**

D. In 2020, Pennichuck Water Works Revenues increased as a result of Order #26,383 in DW19-084 which results in a shifting of Tier 1 expenses between the regulated Utilities resulting in a pro forma increase in the Company's share of PWW's Mgt Fee

Therefore:	**$**	**3,018**
TOTAL MANAGEMENT FEE EXPENSE PRO FORMA:	**$**	**1,385**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Property and Other Taxes Expense
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment G

I PROPERTY TAXES

A. To reflect a pro forma property tax adjustment for the net change in property taxes for the Town of Pittsfield and the State of New New Hampshire. Schedule 1A reflects the tax rate, taxes paid in the test year, the pro forma adjustments for increases in property taxes based on the tax year for each community, and the consolidated property tax adjustment.

Therefore:	**$**	**(230)**
TOTAL PROPERTY AND OTHER TAXES EXPENSE PRO FORMA:	**$**	**(230)**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Amortization Account
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment H

No deferred assets were added to PAC during the test year or will be added during the 12 months after the test year. No deferred assets on the Company's books were fully amortized during the test year or will be fully amortized during the 12 months following the test year.

TOTAL AMORTIZATION EXPENSE PRO FORMA:	**$ -**

Pittsfield Aqueduct Company
Non Material Operating Expenses as defined in DW17-128
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment I

		January	February	March	April	May	June	July	August	Septembe	October	Novembe	December		2019 Totals
921002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
921003	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
921004	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
923000	OUTSIDE SERVICES	-	-	-	1	-	-	8,971	-	-	-	-	-	**8,972.36**	8,972.36
926001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926500	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926501	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926502	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926505	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926600	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
926610	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
930100	#N/A	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
930101	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	**#N/A**	#N/A
930200	PUBLIC RELATIONS	20	-	-	-	-	-	-	-	-	-	-	-	**20.18**	20.18
930300	MEALS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
930410	CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
														Total of Non RSF backed O&M Expenses -	**$ 8,992.54**

Pittsfield Aqueduct Company
Pro Forma Adjustment Income or Expense
Income Taxes Account
Proposed Rate Making - Cash Income Taxes
For the Twelve Months Ended December 13, 2019

Schedule 1
Attach J

I INCOME TAX EXPENSE

A. To reflect the pro forma adjustment to book basis income taxes versus actual tax payments made to Federal and State Governments in 2019

Pittsfield Aqueduct Company Book Basis 2019 Federal and State Income Taxes

	2019 Book Basis (1)	2019 Actual Tax Payments (2)	Proforma
PROV/FED INC TAX/CURRENT	$ 8,125	$ -	$ (8,125)
PROVS FOR NH BUS PRFTS TAX CUR	$ 2,114	$ -	$ (2,114)
PROV/FED INC TAX/DEFERRED	$ 3,468	$ -	$ (3,468)
PROV NH INCOME TAX DEFERRED	$ (178)	$ -	$ 178
NH BUSINESS ENTERPRISE TAX	$ 1,258	$ 1,258	$ 0
INVESTMENT TAX CREDITS		$ -	$ -
TOTALS	$ 14,787	$ 1,258	$ (13,529)

Notes:

(1) Taxes based on 2019 Profit and Loss Statement which reflects taxes calculated on PWW's book basis pretax income at the Federal and State statutory income tax basis

(2) Cash payments made by to the Federal and State Governments based on 2019 Corporate Tax Returns based on PAC's share of PCP BET tax of 1.00% of the actual 2019 tax payment in the amount of $ 125,825

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment Income or Expense
Depreciation Account
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment K

I DEPRECIATION

A. In 2019, the Company added depreciable assets and only 1/2 year depreciation expense was reflected in the test year. An additional 1/2 year depreciation expense is added per the following per forma adjustment in order to reflect a full year depreciation expense in the test year. (Schedule 3, Attachment A, Exhibit 1)

Therefore:	**$**	**274**

B. In the test year, the Company disposed of depreciable assets. The total depreciation expense reflected in the test year for these assets was as follows: (Schedule 3, Attachment A, Exhibit 3)

Therefore:	**$**	**(59)**

C. In Order 25,292 (DW11-026) dated November 23, 2011, the NHPUC approved a settlement agreement in which the settling parties agreed to a proforma adjustment for depreciation expense related to certain amount of equity related assets. The Company is reflecting the proforma adjustment as follows:

Equity related assets as of 1/25/12	1,063,241		
Composite Depreciation Rate	2.57%		
	27,325		
Therefore:		**$**	**(27,325)**
TOTAL DEPRECIATION EXPENSE PRO FORMA:		**$**	**(27,111)**

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment Income or Expense
Income Taxes Account
For the Twelve Months Ended December 31, 2019

Schedule 1
Attachment L

I INCOME TAXES

A. To reflect the pro forma adjustment to record the income tax effect of the pro forma adjustments for the test year.

Therefore:

(Sch1)	Water Sales				$	(147,539)
(Sch1)	Other Operating Reveues					-
	Total Revenues					(147,539)
Less:	Expenses					
(Sch1, Attach B)	Production Expense					1,537
(Sch1, Attach C)	Distribution Expense					3,117
(Sch1, Attach D)	Customer Accounting					(422)
(Sch1, Attach E)	Administrative & General					623
(Sch1, Attach F)	Management Fee					1,385
(Sch1, Attach G)	Total Prop & Other Taxes					2,513
(Sch1, Attach K)	Depreciation					(27,111)
(Sch1, Attach F)	Amortization **(1)**					34,349
				Total	$	(15,992)

Pro Forma NHBP Tax @ 8.5%.

Therefore:

$	(163,531)	7.7%		**$**	**(12,592)**
			Sub Total	$	(150,939)

Pro Forma FIT Tax 34%

Therefore:

$	(150,939)	21%		**$**	**(31,697)**
			Sub Total	$	(31,697)

TOTAL INCOME TAXES PRO FORMA:	**$**	**(44,289)**

Note:

(1) Per Order 25,292 in DW 11-026, the Schedule 1, Attachment F, Adjustment I C, eliminates the amortization of the Municipal Acquisition Regulatory Asset (MARA). The MARA amortization was not tax affected/subject to tax and is considered a permanent difference item between book and taxable income. Therefore, the Amortization Pro Form Amount reflected does not include the elimination of the MARA amortization as it has no tax impact:

Total Amortization Expense Pro Forma (Schedule 1, Attachment H)	$	-
Less: MARA Amortization (Adjustment I C)	$	(34,349)
Net Amortization Expense Pro Forma	$	34,349

Pittsfield Aqueduct Company
Property Taxes
For the Twelve Months Ended December 31, 2019

Schedule 1A

TOWN	TAX YEAR	TEST YEAR	TOTAL BILL FOR TAX YEAR 2019	TOTAL EXPENSE FOR 2019	PRO FORMA PROPERTY TAX	PROPERTY TAX ADJUSTMENTS (1)	PRO FORMA PROPERTY TAX ADJUSTMENT		Dec-18	Jun-19	Dec-19
PITTSFIELD	04/01/19 - 03/31/20	01/01/19- 12/31/19									
000017-000000			$ 142,462	$ 143,147					72,601.00	72,508.00	69,954.00
000042-000000			294	296					150.00	150.00	144.00
000001-000000			497	499					253.00	253.00	244.00
000013-000000			788	792					402.00	401.00	387.00
000014-000000			1,034	1,039					526.00	526.00	508.00
000006-000000			1,902	1,911					969.00	968.00	934.00
000007-000000			1,279	1,285					651.00	651.00	628.00
000008-000000			1,313	1,319					669.00	668.00	645.00
000010-000000			1,414	1,421					721.00	720.00	694.00
000010-000001			494	497					252.00	251.00	243.00
000012-000001			574	577					292.00	292.00	282.00
000013-000000			1,653	1,661					842.00	841.00	812.00
000014-000000			1,469	1,476					749.00	748.00	721.00
000015-000000			1,598	1,606					814.00	813.00	785.00
000016-000000			1,098	1,104					560.00	559.00	539.00
000003-000000			7,477	7,513					3,811.00	3,806.00	3,671.00
000002-000000			1,073	1,078					547.00	546.00	527.00
000003-000000			469	471					239.00	239.00	230.00
			$ 166,888	$ 167,690	$ (802)	$ 470	$ (332)		85,048.00	84,940.00	81,948.00
STATE OF NH	04/01/19 - 03/31/20	01/01/19- 12/31/19	$ 19,254	$ 19,254	$ -	101	$ 101		19,841.00		19,254.00
			$ 186,142	$ 186,944	$ (802)	$ 572	$ (230)	-			

(1) Net value of change in property taxes for plant added or retired in 2019 per Sch 1A, Attach A and Attach B.

Pittsfield Aqueduct Company
Taxable Assets Additions
For Twleve Months Ended December 31, 2019

Schedule 1A Attachment A

Asset ID	Description	Placed In Service	Book Cost	Tax Rate	Local Property Tax
Town or Department: Pittsfield					
Asset Type: PAC ELECTRIC PUMPING EQUIPMENT: PUMPS					
Asset GL Acct #: 311210-6000-001					
600-00000050	Pittsfield: Boost Pump and Motor Rebuild	7/1/2019	$1,320.90	30.66	40.50
Subtotal: 311210-6000-001			**$1,320.90**		**40.50**
Asset Type: PAC TRANS DIST MAINS - 6" & LARGER					
Asset GL Acct #: 331100-6000-001					
600-00000059	Catamount RD Water Main Phase 2	10/1/2019	($4.50)	30.66	(0.14)
600-00000060	Broadway Street Main Replacement	10/1/2019	$509.40	30.66	15.62
Subtotal: 331100-6000-001			**$504.90**		**(0.14)**
Asset Type: PAC SERVICES					
Asset GL Acct #: 333100-6000-001					
600-00000063	Fairview Road (#49): Pittsfield - 1in	11/1/2019	$4,365.71	30.66	133.85
Subtotal: 333100-6000-001			**$4,365.71**		**133.85**
Asset Type: PAC RENEWED SERVICES					
Asset GL Acct #: 333200-6000-001					
600-00000048	Catamount Road (#47): Pittsfield 1in.	3/1/2019	$5,076.26	30.66	155.64
Subtotal: 333200-6000-001			**$5,076.26**		**155.64**
Asset Type: PAC METERS					
Asset GL Acct #: 334000-6000-001					
600-00000047	5/8in. Pac Install New Meter: Pittsf	1/1/2019	$74.59	30.66	2.29
600-00000052	5/8in Install New Meter	7/1/2019	$74.59	30.66	2.29
600-00000056	5/8in. Pac Install New Meter: Pittsf	9/1/2019	$74.59	30.66	2.29
600-00000057	5/8in Pac Install New Meter: Pittsf	10/1/2019	$74.59	30.66	2.29
600-00000061	650 - 5/8in. Pac Install New Meter: Pitt	11/1/2019	$298.37	30.66	9.15
600-00000064	1in. Pac Install New Meter: Pittsfield	12/1/2019	$200.30	30.66	6.14
Subtotal: 334000-6000-001			**$797.03**		**24.44**
Asset Type: PAC RADIOS FOR METERING EQUIPMENT					
Asset GL Acct #: 334100-6000-001					
600-00000049	Pac Neptune Radio Replacements: Pi	5/1/2019	$93.82	30.66	2.88
600-00000051	654 - Pac Neptune Radio Replacements	7/1/2019	$96.88	30.66	2.97
600-00000053	PAC Neptune Radio Replacements	8/1/2019	$96.88	30.66	2.97
600-00000058	654 - Pac Neptune Radio Replacements: Pi	10/1/2019	$96.88	30.66	2.97
600-00000062	654 - Pac Neptune Radio Replacements: Pi	11/1/2019	$200.80	30.66	6.16
600-00000065	Pac Neptune Radio Replacements	12/1/2019	$100.40	30.66	3.08
Subtotal: 334100-6000-001			**$685.66**		**21.02**
Asset Type: PAC COMMUNICATION EQUIPMENT					
Asset GL Acct #: 346000-6000-001					
600-00000054	Install Cellular Alarm	8/1/2019	$5,324.17	30.66	163.24
600-00000055	Install Cellular Alarm	9/1/2019	$135.07	30.66	4.14
Subtotal: 346000-6000-001			**5,459.24**		**167.38**
Subtotal: Pittsfield		**Value of Plant added in 2019 -**	**17,704.80**		**542.83**

Pittsfield Acqueduct Company
Taxable Assets for Asset Dispositions
For the Twelve Months Ended December 31, 2019

Schedule 1A Attachment B

Description	Placed In Service	Disposal Date	Cost	Tax Rate	Local Property Tax
Catamount Road (#47): Pittsfield - 1 CT	7/1/1978	6/30/2019	$115.56	30.66	3.54
			115.56		**3.54**
5/8 New Meter Exchanges: Pittsfield	9/1/2014	12/31/2019	$125.59	30.66	3.85
5/8 Meters: Pittsfield - (6)	9/1/2005	6/30/2019	$585.60	30.66	17.95
5/8 Meters: Pittsfield - (2)	9/1/2005	12/31/2019	$195.26	30.66	5.99
5/8 Meters: Pittsfield - (2)	9/1/2005	3/31/2019	$195.26	30.66	5.99
5/8 Meters: Pittsfield - (4)	9/1/2005	12/31/2019	$390.52	30.66	11.97
			1,492.23		**45.75**
Neptune Radio Replacements: Pittsfield	4/1/2013	10/31/2019	$81.40	30.66	2.50
Neptune Radio Installs: Pittsfield - (2)	9/1/2005	9/30/2019	$190.01	30.66	5.83
Neptune Radio Installs: Pittsfield - (1)	9/1/2005	3/31/2019	$95.00	30.66	2.91
Neptune Radio Installs: Pittsfield - (1)	9/1/2005	6/30/2019	$95.01	30.66	2.91
Neptune Radio Installs: Pittsfield - (3)	9/1/2005	12/31/2019	$293.16	30.66	8.99
			754.58		**23.14**
		Plant Retired in 2019 -	**2,362.37**		**72.43**

Pittsfield Acqueduct Company
Non Union Payroll Summary
PRO FORMA Adjustments
For the Twelve Months Ended December 31, 2019

Schedule Non Union 1B

	Twelve Months Ending 12/31/19	Annualized 2020 Non Union Salaries	Total Proformed Twelve Months 12/31/19
Production Non Union Salaries	$ 846,007	$ 716,706	$ (129,301)
Distribution Non Union Salaries	470,415	433,552	$ (36,863)
Engineering Salaries	547,501	537,918	$ (9,583)
Admin & General Salaries	3,144,575	3,231,674	$ 87,099
Total Non Union Salaries	5,008,498	4,919,850	(88,648)

Notes:

(1) The Company is reflecting the salary changes for 12 months to reflect the Company's full costs on a going forward basis based on the changes to PWW salaries that occurred in April of 2020

Pittsfield Aqueduct Company
PAYROLL SUMMARY
Pro Forma Adjustments
For the Twelve Months Ended December 31, 2019

Schedule Union 1B

	Twelve Months Ending 12/31/19	Wage Increase Effective 1/1/20			Total Proforma for Payroll
Production Labor Expense	$ 29,268	3.45%			$ 1,010
Distribution Labor Expense	$ 54,356	3.45%			$ 1,875
Total	$ 83,624		-	-	$ 2,885

Notes:
(1) The Company is reflecting salary and wage changes for 12 months ot reflect the Company's full costs on a going forward basis.

2019 Workorder Costs

Source: 2019 Mgt Fee		Production	Distribution			Jobbing			Jobbing		Jobbing		
	PWW Capital	070 WTP Maintenance	080 OPS Maintenance	Fleet	PWW Jobbing	PWS Maintenance	PWS Jobbing	PAC Capital	PAC Maintenance	PEU Capital	PEU Maintenance	Total	
Labor	58,274.36	894,072.37	1,745,057.06	77,818.68	48,707.59	425,823.36	56,554.82	3,732.23	83,624.18	27,095.30	762,210.60	4,182,970.55	
Contractor Clearing	114,695.11	-	-	166,958.84	11,722.11	-	473,888.18	2,696.82	-	100,281.44	-	870,242.50	
Inventory: Pipes & Fittings	26,534.47	499.80	74,290.19	-	22,408.08	76.73	921.42	456.88	723.69	10,361.10	17,887.35	154,159.71	
Inventory: Meters	222,176.17	-	2,846.41	-	-	-	2,352.80	1,540.41	320.12	89,738.39	2,923.76	321,898.06	
Inventory: Misc T&D	55.17	-	40.56	-	-	-	-	-	-	-	25.97	121.70	
Inventory: Chemicals	-	913,828.98	-	-	-	-	10,233.07	-	-	-	66,041.51	990,103.56	
Inventory: Fleet	-	-	-	3,220.49	-	-	-	-	-	-	-	3,220.49	
Inventory: Backup Gen Fuel	-	-	-	-	-	-	-	-	-	-	-	-	
Misc T&D Supplies	-	-	-	-	-	-	-	-	-	-	-	-	
Truck	24,529.25	89,684.75	332,620.75	2,024.75	20,294.75	134,802.50	14,904.70	1,345.75	8,863.75	10,028.50	228,599.00	867,698.45	
Backhoe	7,582.75	677.50	37,128.00	-	6,201.75	194.75	612.50	433.75	1,058.25	3,250.50	12,870.25	70,010.00	
Compressor	-	-	4,189.50	-	-	-	-	-	-	-	1,083.00	5,272.50	
Inspection Fees	-	-	-	-	123,612.00	-	-	-	-	-	-	123,612.00	
Overhead	9,112.72	-	-	-	39,004.45	-	-	252.98	-	5,054.04	-	53,424.19	
Labor Overhead	37,229.44	565,411.37	1,103,574.08	49,212.53	47,320.49	264,601.01	36,260.73	2,439.34	44,507.85	17,366.31	488,205.04	2,656,128.19	
Misc General Equipment	-	-	-	-	-	-	-	-	-	-	-	-	
Total Costs	500,189.44	2,464,174.77	3,299,746.55	299,235.29	319,271.22	825,498.35	595,728.22	12,898.16	139,097.84	263,175.58	1,579,846.48	10,298,861.90	
Total Costs w/o OH & CWIP	376,381.61	2,464,174.77	3,299,746.55	132,276.45	268,544.66	825,498.35	121,840.04	9,948.36	139,097.84	157,840.10	1,579,846.48	9,375,195.21	
% of Total	4.86%	23.93%	32.04%	2.91%	3.10%	8.02%	5.78%	0.13%	1.35%	2.56%	15.34%	100.00%	
% of Total w/o OH & CWIP	4.01%	26.28%	35.20%	1.41%	2.86%	8.81%	1.30%	0.11%	1.48%	1.68%	16.85%	100.00%	
Ovhd Allocable to Work Orders													
2,627,831	127,627	628,752	841,955	76,352	81,464	210,632	152,004	3,291	35,492	67,151	403,109	2,627,829	
Totals by Company:													
PWW	127,627	628,752	841,955	76,352	81,464							1,756,150	66.8%
PEU										67,151	403,109	470,260	17.9%
PAC								3,291	35,492			38,783	1.5%
PWS						210,632	152,004					362,636	13.8%
Total Overhead	127,627	628,752	841,955	76,352	81,464	210,632	152,004	3,291	35,492	67,151	403,109	2,627,829	100.0%
% Labor	1.39%	21.37%	41.72%	1.86%	1.16%	10.18%	1.35%	0.09%	2.00%	0.65%	18.22%	100.00%	

**070, 080 & Fleet Labor Overhead has been calculated per Charlie.

1.00

		Cap Labor	Labor Expense	
Total Union Labor per Synergen	4,282,934			
Total Labor per Schedule	4,182,971		4,182,971	
Spec Projects		99,964		
Union Labor Capitalized				
PWW Capital	58,274			
PAC Capital	3,732			
PEU Capital	27,095	89,102	(89,102)	
Totals				
Totals		189,066	4,093,869	4,282,934

Pittsfield Aqueduct Company
2019 Test Year Revenues and Pumpage PRO FORMA

Schedule 1C

Revenue Type		2019 Test Year Billed Revenues	2019 TY Revenue Proformas based on Five Yr Ave	Proforma Rate Case 2019 TY Revenues based on Five Yr Ave
Total PAC Volumetric Charges	-	$ 355,443	$ 4,270	$ 359,713
Total PAC Meter Charges (Fixed Fee)	-	$ 211,560		$ 211,560
Total PAC Municipal Fire Protection Charges (Fixed Fee)	-	$ 175,804		$ 175,804
Total PAC Private Fire Protection Charges (Fixed Fee)	-	$ 29,067		$ 29,067
Total Billed 2019 PEU Revenues	-	$ 771,874	$ 4,270	$ 776,144

PAC Volumetric Sales and Pumpage in CCF's

		2015	2016	2017	2018	2019	2019 Volumetric Sales & Pumpage Proforma's (CCF)2	Proformed Five Year Average 2019 Volumetric Sales & Pumpage2	Actual Five Year Average Volumetric Sales & Pumpage2
Total PAC volumetric sales (CCF)		$ 52,620	$ 58,012	$ 57,018	$ 57,011	$ 55,342	659	56,001	56,001
PAC WTP production (CCF)	-	$ 68,174	$ 73,983	$ 62,615	$ 61,037	$ 58,667	2,106	60,773	60,773
% Unaccounted for PAC	-	22.8%	21.6%	8.9%	6.6%	5.7%			
Increase (reduction) in CCF's production for the year from 5 Year Average(2)	-	7,401	13,210	1,842	264	(2,106)			
Increase (reduction) in CCF's production from for the year Extreme Year	-	(5,809)	-	(11,368)	(12,946)	(15,316)			
Percent Increase (reduction) in production for the year from 5 Year Average(2)	-	12.2%	21.7%	3.0%	0.4%	-3.5%			
Percent Increase (reduction) in CCF's production for the year from Extreme Year	-	-7.9%	0.0%	-15.4%	-17.5%	-20.7%			

Notes:
1. Revenues proformed to 5 year average consumption for volumetric charges only.
2019 PAC Volumetric Rate - $ 6.48 per CCF
2. Five year production average is based on three years production, 2017, 2018 and 2020 due to the elimination of unaccounted for water that resulted in higher production during 2014 and 2015

Pittsfield Aqueduct Company
BALANCE SHEET
ASSETS AND DEFERRED CHARGES
For the Twelve Months Ended December 31, 2019

Schedule 2

	Account Number	12/31/2019	13 MONTH TEST YR AVERAGE	12/31/2018	12/31/2017
PLANT ASSETS					
Plant in Service	301 to 348	4,668,042	4,661,211	4,654,389	4,654,736
Work in process	105	6,177	7,005	6,708	828
Utility Plant		4,674,219	4,668,216	4,661,096	4,655,563
Accumulated depreciation	108	1,568,525	1,521,605	1,472,217	1,389,966
Net Plant		3,105,694	3,146,610	3,188,879	3,265,597
Net Acquisition Adjustment	114 & 115	-	-	-	-
Total Net Utility Plant		3,105,694	3,146,610	3,188,879	3,265,597
CURRENT ASSETS					
Cash & Special Deposits	131 & 133	-	-	-	-
Accounts receivable-billed, net	141 & 143	25,808	36,028	41,583	47,316
Accounts receivable-unbilled, net	173	75,932	74,377	79,074	75,385
Accounts receivable-other	142	-	-	-	-
Materials & Supplies	151	-	-	-	-
Prepaid expenses	162	150	362	233	2,819
Prepaid property taxes	163 & 236	40,974	24,781	42,524	34,407
Prepaid taxes	162.3	-	-	-	-
		142,864	135,548	163,414	159,927
OTHER ASSETS					
Debt issuance expenses	181	21,205	21,579	21,953	20,208
Other & Def Charges	182,184,186	1,191,387	1,214,964	1,237,794	1,274,424
		1,212,592	1,236,543	1,259,747	1,294,631
TOTAL ASSETS		**$ 4,461,150**	**$ 4,518,701**	**$ 4,612,040**	**$ 4,720,155**

Pittsfield Aqueduct Company
BALANCE SHEET
EQUITY AND LIABILITIES
For the Twelve Months Ended December 31, 2019

Schedule 2A

	Account Number	12/31/2019	13 MONTH TEST YR AVERAGE	12/31/2018	12/31/2017
STOCKHOLDERS' EQUITY					
Common stock	201	100	100	100	100
Paid in capital	211	1,899,596	1,905,092	1,935,318	2,064,824
Retained earnings	215	(131,389)	(135,298)	(137,454)	(23,553)
		1,768,307	1,769,893	1,797,964	2,041,371
LONG TERM DEBT					
Bonds, notes and mortgages	221	164,458	166,403	168,331	171,163
Intercompany advances	223	1,162,402	1,189,012	1,257,695	1,200,423
Other Long Term Debt	224	-	-	-	-
CURRENT LIABILITIES					
Accounts payable	231	3,262	15,990	1,956	7,622
Accrued property taxes	236	-	-	2,258	-
Accrued interest payable	237	-	-	-	-
Other accrued expenses	241	319	1,710	317	318
Income taxes payable	236	-	-	-	-
Customer deposits & other	235	-	-	-	-
		3,581	17,700	4,530	7,940
OTHER LIABILITIES AND DEFERRED CREDITS					
Deferred Income Tax	282	711,559	709,835	709,691	602,444
Customer advances	252	-	-	-	-
CIAC, net	271 & 272	650,844	662,336	673,829	696,815
Other long term liabilities		-	-	-	-
		1,362,403	1,372,171	1,383,520	1,299,259
TOTAL EQUITY AND LIABILITIES		**$ 4,461,150**	**$ 4,515,180**	**$ 4,612,040**	**$ 4,720,155**

Pittsfield Aqueduct Company
ACCUMULATED DEPRECIATION
For The Twelve Months Ended December 31, 2018 - 2019

Schedule 2 Attach A

ACCOUNT CLASSIFICATION	Asset Account Number	12/31/19	12/31/18
Structures	301	$ 584,374	$ 555,151
Land	303	-	$ -
Pumping and Distribution Equipment	304 to 310	43,003	37,664
Transmission and Distribution Mains	311 to 320	1,016,040	968,874
Services	331	85,800	81,531
Meters	333	80,797	77,319
Hydrants	334	46,689	43,810
Intangible Plant	335	64,218	60,440
Other Equipment	339 to 348	84,250	81,258
TOTAL		**$ 2,005,171**	**$ 1,906,047**
Accumulated Depreciation - Loss		$ (192,442)	$ (191,955)
Accumulated Depreciation - Cost of Removal		$ (242,562)	$ (241,875)
GRAND TOTAL		**$ 1,570,167**	**$ 1,472,217**

Accum Depr - Plant in Service		
Per BNA (includes Lshld Impvmnts)	$ 2,005,171	$ 1,906,047
Per Consolidating FS	1,998,383	1,906,047
Plus Lshld Imprvmnts	-	-
Plus Intangible Plant	-	-
Variance due to fixed asset software conversion	-	-
Diff in Open Bal Acq Adj	-	-
Difference	$ 6,788	$ -

		2018	2019
108001	ACCUM DEPREC: COST OF REM -PAC	241,875.23	242,561.67
108002	ACCUM DEPRECIATION: LOSS -PAC	191,954.99	192,442.06
	Variance due to fixed asset software conversion	-	-
108000	ACCUMULATED DEPRECIATION: PAC	(1,906,047.48)	(1,998,382.89)
		(1,472,217)	**(1,563,379)**
		1,472,217	1,570,167

Pittsfield Aqueduct Company
Depreciation Expense [Depreciation]
GAAP
For the Period January 1, 2019 to December 31, 2019
All Assets

Schedule 2 Attach A Support

Asset GL Acct #	Book Cost	Depr & AFYD This Period	Beginning Accum Depr	Current Depr & AFYD	Net Sec 179/Sec 179A	Net Additions Deletions	Ending Accum Depr
Intangible Plant							
301000-6000-001	75,550.65	3,777.54	60,440.49	3,777.54	0.00	0.00	64,218.03
	75,550.65	**3,777.54**	**60,440.49**	**3,777.54**	**-**	**-**	**64,218.03**
Land							
303100-6000-001	44,180.00	0.00	0.00	0.00	0.00	0.00	0.00
303300-6000-001	16,153.19	0.00	0.00	0.00	0.00	0.00	0.00
	60,333.19	**-**	**-**	**-**	**-**	**-**	**-**
Structures							
304100-6000-001	71,250.05	1,875.00	27,337.43	1,875.00	0.00	0.00	29,212.43
304700-6000-001	1,080.00	33.96	220.63	33.96	0.00	0.00	254.59
304800-6000-001	935,239.10	19,118.16	443,586.18	19,118.16	0.00	0.00	462,704.34
305000-6000-001	137,331.50	2,459.82	20,501.62	2,459.82	0.00	0.00	22,961.44
306000-6000-001	38,270.60	846.72	9,404.31	846.72	0.00	0.00	10,251.03
309000-6000-001	309,352.70	4,890.00	54,100.58	4,890.00	0.00	0.00	58,990.58
	1,492,523.95	**29,223.66**	**555,150.75**	**29,223.66**	**-**	**-**	**584,374.41**
Pump/Dist Equip							
310000-6000-001	55,407.06	2,662.44	16,802.11	2,662.44	0.00	0.00	19,464.55
311200-6000-001	1,651.09	70.56	786.67	70.56	0.00	0.00	857.23
311210-6000-001	15,425.94	619.14	2,483.25	619.14	0.00	29.03	3,131.42
320200-6000-001	17,042.89	565.56	3,111.50	565.56	0.00	0.00	3,677.06
320310-6000-001	41,963.48	1,391.58	14,480.87	1,391.58	0.00	0.00	15,872.45
	131,490.46	**5,309.28**	**37,664.40**	**5,309.28**	**-**	**29.03**	**43,002.71**
Trans/Dist Mains							
331000-6000-001	5,000.00	122.64	1,833.52	122.64	0.00	0.00	1,956.16
331001-6000-001	3,788.88	77.16	1,195.38	77.16	0.00	0.00	1,272.54
331002-6000-001	124,788.30	3,215.33	14,369.05	3,215.33	0.00	0.00	17,584.38
331003-6000-001	2,833.21	68.58	994.89	68.58	0.00	0.00	1,063.47
331100-6000-001	603,751.20	10,314.41	101,983.28	10,314.41	0.00	27.75	112,325.44
331150-6000-001	316,734.00	4,765.08	96,732.18	4,765.08	0.00	0.00	101,497.26
331200-6000-001	216.00	5.96	50.67	5.96	0.00	0.00	56.63
331250-6000-001	9,998.74	301.44	2,578.05	301.44	0.00	0.00	2,879.49
331251-6000-001	91,666.80	2,511.59	10,887.22	2,511.59	0.00	0.00	13,398.81
331252-6000-001	284.49	6.60	93.04	6.60	0.00	0.00	99.64
331400-6000-001	805,338.48	18,465.94	570,124.84	18,465.94	0.00	0.00	588,590.78
331401-6000-001	390,239.50	7,282.98	168,032.26	7,282.98	0.00	0.00	175,315.24
	2,354,639.60	**47,137.71**	**968,874.38**	**47,137.71**	**-**	**27.75**	**1,016,039.84**
Services							
333004-6000-001	3,700.02	92.11	637.47	92.11	0.00	0.00	729.58
333100-6000-001	117,207.78	2,670.94	62,581.41	2,670.94	0.00	-62.32	65,190.03
333200-6000-001	67,128.44	1,506.21	18,312.29	1,506.21	0.00	61.91	19,880.41
	188,036.24	**4,269.26**	**81,531.17**	**4,269.26**	**-**	**(0.41)**	**85,800.02**
Meters							
334000-6000-001	84,230.55	3,804.06	42,441.82	3,804.06	0.00	-863.29	45,382.59
334100-6000-001	61,640.83	939.58	34,876.70	939.58	0.00	-402.03	35,414.25
	145,871.38	**4,743.64**	**77,318.52**	**4,743.64**	**-**	**(1,265.32)**	**80,796.84**
Hydrants							
335000-6000-001	79,503.27	2,200.16	33,227.01	2,200.16	0.00	0.00	35,427.17
335005-6000-001	184.00	4.20	51.12	4.20	0.00	0.00	55.32
335100-6000-001	25,375.00	675.24	10,531.46	675.24	0.00	0.00	11,206.70
	105,062.27	**2,879.60**	**43,809.59**	**2,879.60**	**-**	**-**	**46,689.19**
Other Equipment							
339000-6000-001	1,495.00	13.68	1,255.01	13.68	0.00	0.00	1,268.69
343000-6000-001	9,687.95	518.10	8,392.70	518.10	0.00	0.00	8,910.80
344000-6000-001	31,159.42	1,618.39	16,406.66	1,618.39	0.00	-1,032.55	16,992.50
346000-6000-001	30,662.09	1,338.29	14,640.44	1,338.29	0.00	143.66	16,122.39
347110-6000-001	24,555.64	0.00	24,555.64	0.00	0.00	0.00	24,555.64
348000-6000-001	16,974.54	391.98	16,007.73	391.98	0.00	0.00	16,399.71
	114,534.64	**3,880.44**	**81,258.18**	**3,880.44**	**-**	**(888.89)**	**84,249.73**
	4,668,042.38	**101,221.13**	**1,906,047.48**	**101,221.13**	**-**	**(2,097.84)**	**2,005,170.77**

Pittsfield Aqueduct Company
OTHER DEFERRED CHARGES - OTHER ASSETS
For the Twelve Months Ended December 31, 2019

Schedule 2
Attachment C

ACCOUNT #	DESCRIPTION	12/31/19	12/31/18	12/31/17	EXPLANATION
186100	ACQUISITION PREMIUM - MARA	1,186,226	1,220,575	1,254,117	
186240	SARBANES-OXLEY	-	-	-	Note 1
186245	TILTON HILL ROAD MAIN BREAK	-	-	-	
186255	MAIN BREAK - OCTOBER 2003	-	-	-	
186260	SOUTH MAIN LEAK RESEARCH	-	-	-	
186265	ABATEMENT	-	8,971	8,971	
186300	GRANT APPLICATION - 2008	-	-	-	
186350	LOUDON RD MAIN BREAK	-	-	-	
186360	FAIRVIEW ROAD MAIN BREAK	-	-	-	
186380	RATE CASE EXPENSE: 2007	-	-	-	
186385	2010 DEFERRED RATE CASE EXP	-	-	-	
186390	RATE CASE EXPENSE: 2012	-	-	-	
186450	CONCORD HILL ROAD SERVICE REPR	-	-	-	
186650	EMINENT DOMAIN	3,669	3,669	3,669	
186675	WEB SITE UPGRADE 2006	-	-	-	
186680	WEB-SITE UPGRADE 2011	-	-	-	
186285	BERRY POND BATHYMETRIC SURVEY	5,161	8,248	11,335	
186698	BERRY POND BATHYMETRIC SURVEY	-	-	-	
186998	EMINENT DOMAIN ALLOWANCE	(3,669)	(3,669)	(3,669)	
	TOTAL 186	**1,191,387**	**1,237,794**	**1,274,424**	

Notes:

(1) Order 25,292 (DW 11-026) approved the establishment and amortization of the regulatory asset known as the MARA for the Company.
MARA is treated as an Equity-Related Item that is removed for the traditional ratemaking process and is subject to recovery only through the CBFRR.

Pittsfield Aqueduct Company
Net Book Value [Amortization]
For the Period January 1, 2019 to December 31, 2019
Deferred Assets Additions
GAAP

Schedule 2 Attach B Pg 1

	ASSET BALANCES				AMORTIZATION										
Asset ID	**Beginning**	**Additions**	**Deletions**	**Ending**	**Beg. Balance**	**Amort. Exp**	**Oth. Additions**	**Deletions**	**End. Balance**	**Net Book Value**	Years	Months	Full Year Amort	Pro Forma Adjustment (1)	Adjusted Book Value
Asset GL Acct #: 184100-7000-001 Life Yr Mo: 0 yr 0 mo															
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 184100-7000-001	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186100-7000-001 Life Yr Mo: 0 yr 0 mo															
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186100-7000-001	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186265-7000-001 Life Yr Mo: 0 yr 0 mo															
70000-008795	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186265-7000-001	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186400-7000-001 Life Yr Mo: 0 yr 0 mo															
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186400-7000-001	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186410-7000-001 Life Yr Mo: 0 yr 0 mo															
51.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186410-7000-001 (7)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186500-7000-001 Life Yr Mo: 25 yr 0 mo															
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186500-7000-001 (1)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Asset GL Acct #: 186730-7000-001 Life Yr Mo: 0 yr 0 mo															
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Subtotal: 186730-7000-001 (1)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
Grand Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					

**Life is original life of deferred asset, subsequent entries should expire the same month as original.*

Pittsfield Aqueduct Company
Net Book Value [Amortization]
For the Period January 1, 2019 to December 31, 2019
Deferred Assets
GAAP

Schedule 2 Attach B Support

		ASSET BALANCES				AMORTIZATION					
Asset ID	Description	Beginning	Additions	Deletions	Ending	Beg. Balance	Amort. Exp	Oth. Additions	Deletions	End. Balance	Net Book Value
Asset GL Acct #: 186285-6000-001	Life Yr Mo: 10 yr 0 mo										
60000-001077	Berry Pond Water Quality Evaluation & Ba	1,169.24	0.00	0.00	1,169.24	857.29	116.86	0.00	0.00	974.15	195.09
60000-001078	Berry Pond Water Quality Evaluation & Ba	4,000.00	0.00	0.00	4,000.00	2,932.59	399.78	0.00	0.00	3,332.37	667.63
60000-001079	Berry Pond Water Quality Evaluation & Ba	12,000.00	0.00	0.00	12,000.00	8,797.84	1,199.28	0.00	0.00	9,997.12	2,002.88
60000-001080	Berry Pond Water Quality Evaluation & Ba	8,000.00	0.00	0.00	8,000.00	5,865.34	799.50	0.00	0.00	6,664.84	1,335.16
60000-001081	Berry Pond Water Quality Evaluation & Ba	123.89	0.00	0.00	123.89	90.77	12.38	0.00	0.00	103.15	20.74
60000-001082	Berry Pond Water Quality Evaluation & Ba	542.50	0.00	0.00	542.50	397.80	54.22	0.00	0.00	452.02	90.48
60000-001083	Berry Pond Water Quality Evaluation & Ba	146.16	0.00	0.00	146.16	107.23	14.58	0.00	0.00	121.81	24.35
60000-001100	Berry Pond Water Quality Evaluation & Ba	343.43	0.00	0.00	343.43	243.18	34.32	0.00	0.00	277.50	65.93
60000-001119	Berry Pond Water Quality Evaluation & Ba	1,924.14	0.00	0.00	1,924.14	1,389.39	201.00	0.00	0.00	1,590.39	333.75
60000-001143	Berry Pond Water Quality Evaluation & Ba	1,846.52	0.00	0.00	1,846.52	1,305.13	203.52	0.00	0.00	1,508.65	337.87
60000-001147	Berry Pond Water Quality Evaluation & Ba	470.44	0.00	0.00	470.44	330.91	52.26	0.00	0.00	383.17	87.27
Subtotal: 186285-6000-001		**30,566.32**	**0.00**	**0.00**	**30,566.32**	**22,317.47**	**3,087.70**	**0.00**	**0.00**	**25,405.17**	**5,161.15**
Grand Total		**30,566.32**	**0.00**	**0.00**	**30,566.32**	**22,317.47**	**3,087.70**	**0.00**	**0.00**	**25,405.17**	**5,161.15**

Pittsfield Aqueduct Company **Schedule 2C**

CONTRIBUTIONS IN AID OF CONSTRUCTION

For the Twelve Months Ended December 31, 2019

		2015	2016	2017	2018	2019
271200	CONTRIBUTIONS IN AID OF CONST	750,287	750,287	750,287	750,287	750,287
271201	CIAC-WATER FILTRATION GRANT	398,350	398,350	398,350	398,350	398,350
	TOTAL CIAC	**1,148,636**	**1,148,636**	**1,148,636**	**1,148,636**	**1,148,636**
272101	RESERVE FOR AMORT OF CIAC:PAC	(405,848)	(428,749)	(451,821)	(474,807)	(495,877)
	TOTAL RESERVE FOR AMORT OF CIAC	**(405,848)**	**(428,749)**	**(451,821)**	**(474,807)**	**(495,877)**
	GRAND TOTAL OF CIAC	**742,788**	**719,887**	**696,815**	**673,829**	**652,759**

PITTSFIELD AQUEDUCT COMPANY
COMPUTATION OF RATE BASE
For the Twelve Months Ended December 31, 2019

Schedule 3

Description	Test Year Average (Sch 3B)	Year End Rate Base	Pro Forma Adjustments Permanent Rates		Pro Forma Test Year
Plant in Service	$ 4,661,211	$ 4,668,042	$ (1,061,202)	(1)	$ 3,600,009
Accum Deprec	1,956,283	2,005,171	(59)	(2)	1,956,224
Accum Deprec: Loss	192,334	194,062	-		192,334
Accum Deprec: COR	242,345	242,584	-		242,345
CIAC	1,148,636	1,148,636	-		1,148,636
Amort of CIAC	486,300	497,793	-		486,300
	2,477,271	2,448,674	(1,061,143)		1,416,128
ADD:					
Working Cap	49,026	31,334	769	(3)	49,795
Materials & Supplies	-	5,901	-		-
Prepayments	1,829	31,188	-		1,829
Other & Deferred Charges	1,214,964	1,458,586	(1,203,429)	(4)	11,535
	1,265,819	1,527,009	(1,202,660)		63,159
DEDUCT:					
Customer Advances	-	-	-		-
Customer Deposits	-	-	-		-
Deferred Income Tax	508,618	525,781	-		508,618
	508,618	525,781	-		508,618
TOTAL Rate Base	**$ 3,234,472**	**$ 3,449,901**	**$ (2,263,803)**		**$ 970,669**

Notes:

(1) adjust test year average to year end for non-revenue producing assets and elimination of equity related assets per Schedule 3, Attachment A
(2) adjust for plant additions per Schedule 3, Attachment C
(3) reflect impact of the expense proforma adjustments on working capital per Schedule 3, Attachment D
(4) adjust for the elimination of MARA per Schedule 3, Attachment B

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment to Rate Base
Plant in Service
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment A

I PLANT IN SERVICE

A. Schedule 3, Attachment A, Exhibit 2, details additions to plant in service that were completed within the test year. All items are capital improvements that are necessitated by mandates, SDWA, regulation, replacement of aging infrastructure or upgrades to the system. All of these plant additions are considered non-revenue producing in nature. The pro forma adjustment reflects the difference between the total cost of the assets added and the portion reflected in the thirteen month average.

Therefore: **$ 3,698**

B Schedule 3, Attachment A, Exhibit 4, details retirements to plant in service that were completed within the test year. All of these plant retirements are considered non-revenue producing in nature. These non revenue producing capital retirements were calculated as part of the thirteen month average of plant in service for the test year. The pro forma adjustment reflects the difference between the total cost of the assets retired and the portion reflected in the thirteen month average.

Therefore: **$ (1,659)**

C. Per Order 25,292 in DW 11-026, eliminate the equity related assets as of 1/25/12. The amounts can be found in Schedule 3(b) page 6 of 6 of the Pennichuck Corporation's 90 day filing dated 4/13/12 and detailed as follows:

Paid in Capital	$	237,129
Retained Earnings	$	826,112
Total Equity 1/25/12	$	1,063,241

Therefore: **(1,063,241)**

TOTAL PRO FORMA PLANT IN SERVICE **$ (1,061,202)**

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment to Rate Base
Deferred Debits
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment B

II DEFERRED DEBITS

A. Per Order 25,292 in DW 11-026, the following pro forma adjustment eliminates the Municipal Acquisition Regulatory Asset (MARA) from rate base calculated on a 13 month average.
(See Schedule 3B - by Account Name)

Therefore:	**$**	**(1,203,429)**
TOTAL PRO FORMA UNAMORTIZED DEFERRED ASSETS:	**$**	**(1,203,429)**

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment to Rate Base
Accumulated Depreciation
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment C

I ACCUMULATED DEPRECIATION		
A To reflect the additional 1/2 year depreciation expense pro forma for capital assets added in the test year (See Schedule 3, Attachment A, Exhibit 1)	$	-
A To reflect the elimination of 1/2 year depreciation expense pro forma for capital assets retired in the test year (See Schedule 3, Attachment A, Exhibit 3)		(59)
TOTAL ACCUMULATED DEPRECIATION PRO FORMA:	**$**	**(59)**

Pittsfield Aqueduct Company, Inc
Pro Forma Adjustment to Rate Base
Working Capital
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment D

I WORKING CAPITAL

A. A pro forma adjustment for working capital is calculated at 45 days divided by 365 days or 12.33%. Total pro forma operation and maintenance expenses (Schedule 1) are for the twelve months of the test year.

Therefore:

Total O & M Expenses	Working Capital Rate		
$ 6,241	12.33%	**$**	**769**
TOTAL PRO FORMA WORKING CAPITAL:		**$**	**769**

PITTSFIELD AQUEDUCT COMPANY
COMPUTATION OF WORKING CAPITAL (O&M) ALLOWANCE
For The Thirteen Months Ended December 31, 2019

Schedule 3A

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Average
Production Expenses	7,478	13,606	11,570	9,929	8,321	13,542	7,967	10,385	9,010	8,525	11,178	14,260	13,022	10,676
Transmission & Distribution Expenses	701	3,114	4,479	2,963	1,475	3,866	12,563	7,408	4,094	1,255	6,246	11,452	2,265	4,760
Engineering Expense	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer Acct & Collection Exp	1,385	855	642	1,092	571	1,125	1,372	3,029	1,075	944	1,184	1,857	1,848	1,306
Administrative & General Expense	1,527	1,443	1,748	1,494	1,492	1,501	1,497	10,462	1,325	1,414	1,475	1,475	1,463	2,178
Inter Div Management Fee	10,243	12,745	10,780	23,421	14,204	14,144	13,311	13,911	13,487	12,352	13,827	16,125	16,230	14,214
Total Operating Expense	21,333	31,764	29,219	38,900	26,064	34,177	36,710	45,195	28,991	24,490	33,909	45,169	34,828	33,135
Allocation Factor	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	12.33%	
Working Capital	2,630	3,916	3,603	4,796	3,214	4,214	4,526	5,573	3,575	3,020	4,181	5,569	4,294	4,085
Annualized	31,565	46,998	43,233	57,556	38,564	50,569	54,316	66,870	42,895	36,235	50,172	66,832	51,532	49,026

PITTSFIELD AQUEDUCT COMPANY
COMPUTATION OF THIRTEEN MONTH AVERAGE BALANCE
For The Thirteen Months Ended December 31, 2019

Schedule 3B

DESCRIPTION	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Average
Plant in Service	4,654,389	4,654,463	4,654,463	4,659,249	4,659,249	4,659,343	4,658,547	4,660,039	4,665,460	4,665,480	4,666,075	4,670,940	4,668,042	4,661,211
Accum Deprec	1,906,047	1,914,516	1,922,983	1,931,288	1,939,761	1,948,235	1,956,137	1,964,604	1,973,098	1,981,484	1,989,977	1,998,383	2,005,171	1,956,283
Accum Deprec: Loss	191,955	191,955	191,955	192,075	192,075	192,075	192,305	192,305	192,305	192,384	192,442	192,442	194,062	192,334
Accum Deprec: COR	241,875	241,884	241,884	242,448	242,448	242,448	242,448	242,456	242,456	242,464	242,529	242,562	242,584	242,345
CIAC	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636	1,148,636
Reserve of CIAC Amort	474,807	476,723	478,638	480,554	482,469	484,385	486,300	488,215	490,131	492,046	493,962	495,877	497,793	486,300
O&M Allowance	31,565	46,998	43,233	57,556	38,564	50,569	54,316	66,870	42,895	36,235	50,172	66,832	51,532	49,026
Materials & Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepayments	233	756	784	1,963	2,612	2,439	2,566	2,667	2,958	2,869	2,473	1,301	150	1,829
Other & Def Charges	1,237,794	1,234,736	1,231,611	1,228,485	1,225,360	1,222,236	1,219,111	1,207,014	1,203,889	1,200,763	1,197,638	1,194,512	1,191,387	1,214,964
Cust Advance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cust Deposit	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Income Tax	508,474	508,474	508,474	508,474	508,474	508,474	508,474	508,474	508,474	508,474	508,474	508,474	510,342	508,618
Regulatory Liability	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217	201,217
Unamortized ITC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Rental Credits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3,068,243	**3,074,671**	**3,061,257**	**3,072,715**	**3,044,688**	**3,046,931**	**3,041,127**	**3,036,636**	**3,008,668**	**2,992,430**	**2,996,986**	**3,007,755**	**2,980,184**	**3,033,255**
MARA														
MARA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MARA	1,220,575	1,217,775	1,214,907	1,212,039	1,209,170	1,206,302	1,203,434	1,200,566	1,197,698	1,194,830	1,191,962	1,189,094	1,186,226	1,203,429
Total MARA	1,220,575	1,217,775	1,214,907	1,212,039	1,209,170	1,206,302	1,203,434	1,200,566	1,197,698	1,194,830	1,191,962	1,189,094	1,186,226	**1,203,429**
Catamount Road	(40,287)	(40,168)	(40,049)	(39,929)	(39,810)	(39,691)	(39,572)	(39,453)	(39,333)	(39,214)	(39,095)	(38,976)	(38,857)	(39,572)
Total Forgivable Debt	(40,287)	(40,168)	(40,049)	(39,929)	(39,810)	(39,691)	(39,572)	(39,453)	(39,333)	(39,214)	(39,095)	(38,976)	(38,857)	**(39,572)**

Pittsfield Acqueduct Inc.
Asset Additions
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment A
Exhibit 1

Asset ID	Asset Description	Placed In Service	Book Cost	Years	Months	Half Yr Dep
Town or Department: Barnstead						
Asset Type: PAC COMMUNICATION EQUIPMENT						
Asset GL Acct #: 346000-6000-001						
600-00000054	Install Cellular Alarm - SCADA	8/1/2019	5,324.17	19	0	140.11
600-00000055	Install Cellular Alarm - SCADA	9/1/2019	135.07	19	0	3.55
Subtotal: 346000-6000-001			**5,459.24**			**143.66**
Asset Type: PAC ELECTRIC PUMPING EQUIPMENT: PUMPS						
Asset GL Acct #: 311210-6000-001						
600-00000050	Pittsfield: Boost Pump and Motor Rebuild	7/1/2019	1,320.90	22	9	29.03
Subtotal: 311210-6000-001			**1,320.90**			**29.03**
Asset Type: PAC METERS						
Asset GL Acct #: 334000-6000-001						
600-00000047	5/8in. Pac Install New Meter: Pittsf	1/1/2019	74.59	20	11	1.78
600-00000052	5/8in Install New Meter	7/1/2019	74.59	20	11	1.78
600-00000056	5/8in. Pac Install New Meter: Pittsf	9/1/2019	74.59	20	11	1.78
600-00000057	5/8in Pac Install New Meter: Pittsf	10/1/2019	74.59	20	11	1.78
600-00000061	650 - 5/8in. Pac Install New Meter: Pitt	11/1/2019	298.37	20	11	7.13
600-00000064	1in. Pac Install New Meter: Pittsfield	12/1/2019	200.30	20	11	4.79
Subtotal: 334000-6000-001			**797.03**			**19.05**
Asset Type: PAC RADIOS FOR METERING EQUIPMENT						
Asset GL Acct #: 334100-6000-001						
600-00000049	Pac Neptune Radio Replacements: Pi	5/1/2019	93.82	20	11	2.24
600-00000051	654 - Pac Neptune Radio Replacements	7/1/2019	96.88	20	11	2.32
600-00000053	PAC Neptune Radio Replacements	8/1/2019	96.88	20	11	2.32
600-00000058	654 - Pac Neptune Radio Replacements: Pi	10/1/2019	96.88	20	11	2.32
600-00000062	654 - Pac Neptune Radio Replacements: Pi	11/1/2019	200.80	20	11	4.80
600-00000065	Pac Neptune Radio Replacements	12/1/2019	100.40	20	11	2.40
Subtotal: 334100-6000-001			**685.66**			**16.39**
Asset Type: PAC RENEWED SERVICES						
Asset GL Acct #: 333200-6000-001						
600-00000048	Catamount Road (#47): Pittsfield 1in.	3/1/2019	5,076.26	41	0	61.91
Subtotal: 333200-6000-001			**5,076.26**			**61.91**
Asset Type: PAC SERVICES						
Asset GL Acct #: 333100-6000-001						
600-00000063	Fairview Road (#49): Pittsfield - 1in	11/1/2019	4,365.71	41	0	53.24
Subtotal: 333100-6000-001			**4,365.71**			**53.24**
Asset Type: PAC TRANS DIST MAINS - 6" & LARGER						
Asset GL Acct #: 331100-6000-001						
600-00000059	Catamount RD Water Main Phase 2	10/1/2019	-4.50	63	8	(0.04)
600-00000060	Broadway Street Main Replacement	10/1/2019	509.40	63	8	4.00
Subtotal: 331100-6000-001			**504.90**			**3.97**
Grand Total			**18,209.70**			**274.01**

Pittsfield Acqueduct Inc.
Non Revenue Producing Capital Additions
For the Twelve Months Ended December 31, 2019

Schedule 3

Attachment A
Exhibit 2

Asset ID	Asset Description	Placed In Service		13		Book Cost	Test Yr Period	Test Yr Amount	Annualized Differential Pro Forma
Town or Department: Barnstead									
Asset Type:PAC COMMUNICATION EQUIPMENT									
Asset GL Acct #: 346000-6000-001									
600-00000054	Install Cellular Alarm - SCADA	8/1/2019	1	13	12	5,324.17	12/13	4,914.62	409.55
600-00000055	Install Cellular Alarm - SCADA	9/1/2019	2	13	11	135.07	11/13	114.29	20.78
Subtotal: 346000-6000-001						**5,459.24**		**5,028.91**	**430.33**
Asset Type: PAC ELECTRIC PUMPING EQUIPMENT: PUMPS									
Asset GL Acct #: 311210-6000-001									
600-00000050	Pittsfield: Boost Pump and Motor Rebuild	7/1/2019	2	13	11	1,320.90	11/13	1,117.68	203.22
Subtotal: 311210-6000-001						**1,320.90**		**1,117.68**	**203.22**
Asset Type: PAC METERS									
Asset GL Acct #: 334000-6000-001									
Life Yr Mo: 62 yr 6 mo									
600-00000047	5/8in. Pac Install New Meter-Replace Failed: Pittsf	1/1/2019	8	13	5	74.59	5/13	28.69	45.90
600-00000052	5/8in. Pac Install New Meter-Replace Failed: Pittsf	7/1/2019	10	13	3	74.59	3/13	17.21	57.38
600-00000056	5/8in. Pac Install New Meter-Replace Failed: Pittsf	9/1/2019	8	13	5	74.59	5/13	28.69	45.90
600-00000057	5/8in. Pac Install New Meter-Replace Failed: Pittsf	10/1/2019	8	13	5	74.59	5/13	28.69	45.90
600-00000064	1 in. Pac Install New Meter-Replace Failed: Pittsf	12/1/2019	10	13	3	200.30	3/13	46.22	154.08
Subtotal: 334000-6000-001						**498.66**		**149.50**	**349.16**
Asset Type: PAC RADIOS FOR METERING EQUIPMENT									
Asset GL Acct #: 334100-6000-001									
600-00000049	Pac Neptune Radio Replacements: Pi	5/1/2019	8	13	5	93.82	5/13	36.08	57.74
600-00000051	654 - Pac Neptune Radio Replacements	7/1/2019	10	13	3	96.88	3/13	22.36	74.52
600-00000053	PAC Neptune Radio Replacements	8/1/2019	8	13	5	96.88	5/13	37.26	59.62
600-00000058	654 - Pac Neptune Radio Replacements: Pi	10/1/2019	8	13	5	96.88	5/13	37.26	59.62
600-00000062	654 - Pac Neptune Radio Replacements: Pi	11/1/2019	8	13	5	200.80	5/13	77.23	123.57
600-00000065	Pac Neptune Radio Replacements	12/1/2019	10	13	3	100.40	3/13	23.17	77.23
Subtotal: 334100-6000-001						**685.66**		**233.36**	**452.30**
Asset Type: PAC RENEWED SERVICES									
Asset GL Acct #: 333200-6000-001									
600-00000048	Catamount Road (#47): Pittsfield 1in.	3/1/2019	5	13	8	5,076.26	8/13	3,123.85	1,952.41
Subtotal: 333200-6000-001						**5,076.26**		**3,123.85**	**1,952.41**
Asset Type: PAC TRANS DIST MAINS - 6" & LARGER									
Asset GL Acct #: 331100-6000-001									
600-00000059	Catamount RD Water Main Phase 2	10/1/2019	8	13	5	-4.50	5/13	(1.73)	(2.77)
600-00000060	Broadway Street Main Replacement	10/1/2019	8	13	5	509.40	5/13	195.92	313.48
Subtotal: 331100-6000-001						**504.90**		**194.19**	**310.71**
Subtotal: Plaistow (1)						**13,545.62**		**9,847.50**	**3,698.12**
Grand Total						**13,545.62**		**9,847.50**	**3,698.12**

Pittsfield Acqueduct Inc.
Asset Dispositions
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment A
Exhibit 3

Description	Placed In Service	Disposal Date	Cost	Depr	Net Proceeds	Accum Loss	Years	Months	Depr Exp	Half Year Depr Exp
PH METER	7/1/1998	12/31/2019	407.51	407.51	-	-	20.00	-	-	-
Purchase New DR5000 Analyzer - Quartz Po	6/1/2012	12/31/2019	678.95	237.67	-	(441.28)	20.00	-	16.97	16.98
Purchase New DR5000 Analyzer - db POUR-T	6/1/2012	12/31/2019	1,107.00	387.37	-	(719.63)	20.00	-	27.68	27.66
			2,193.46	**1,032.55**	**-**	**(1,160.91)**			**44.65**	**44.64**
5/8 New Meter Exchanges: Pittsfield	9/1/2014	12/31/2019	125.59	30.00	-	(95.59)	20.00	11.00	3.00	3.00
5/8 Meters: Pittsfield - (6)	9/1/2005	6/30/2019	585.60	394.39	-	(191.21)	20.00	11.00	13.82	6.91
5/8 Meters: Pittsfield - (2)	9/1/2005	12/31/2019	195.26	114.48	-	(80.78)	-	-	-	-
5/8 Meters: Pittsfield - (2)	9/1/2005	3/31/2019	195.26	114.49	-	(80.77)	-	-	-	-
5/8 Meters: Pittsfield - (4)	9/1/2005	12/31/2019	390.52	228.97	-	(161.55)	-	-	-	-
			1,492.23	**882.33**	**-**	**(609.90)**			**16.82**	**9.91**
Neptune Radio Replacements: Pittsfield	4/1/2013	10/31/2019	81.40	23.21	-	(58.19)	20.00	11.00	1.95	1.92
Neptune Radio Installs: Pittsfield - (2)	9/1/2005	9/30/2019	190.01	111.56	-	(78.45)	-	-	-	-
Neptune Radio Installs: Pittsfield - (1)	9/1/2005	3/31/2019	95.00	55.78	-	(39.22)	-	-	-	-
Neptune Radio Installs: Pittsfield - (1)	9/1/2005	6/30/2019	95.01	55.78	-	(39.23)	-	-	-	-
Neptune Radio Installs: Pittsfield - (3)	9/1/2005	12/31/2019	293.16	172.10	-	(121.06)	-	-	-	-
			754.58	**418.43**	**-**	**(336.15)**			**1.95**	**1.92**
Catamount Road (#47): Pittsfield - 1 CT	7/1/1978	6/30/2019	115.56	115.56	-	-	41.00	-	2.91	2.88
			115.56	**115.56**	**-**	**-**			**2.91**	**2.88**
			4,555.83	**2,448.87**	**-**	**(2,106.96)**	**-**	**-**	**66.33**	**59.35**
			4,555.83	**2,448.87**	**-**	**(2,106.96)**	**-**	**-**	**66.33**	**59.35**

Pittsfield Acqueduct Inc.
Non Revenue Producing Capital Retirements
For the Twelve Months Ended December 31, 2019

Schedule 3
Attachment A
Exhibit 4

Asset ID	Description	Placed In Service	Disposal Date		13		Book Cost	Test Yr Period	Test Yr Amount	Annualized Differential Pro Forma
Town or Department: Barnstead										
Asset Type: LABORATORY EQUIPMENT										
Asset GL Acct #: 344000-6000-001										
60000-000041	PH METER	7/1/1998	12/31/2019	3	13	10	407.51	10/13	313.47	94.04
60000-001131	Purchase New DR5000 Analyzer - Quartz Po	6/1/2012	12/31/2019	3	13	10	678.95	10/13	522.27	156.68
60000-001133	Purchase New DR5000 Analyzer - db POUR-T	6/1/2012	12/31/2019	6	13	7	1,107.00	7/13	596.08	510.92
Subtotal: 344000-6000-001							**2,193.46**		**1,431.82**	**761.64**
Asset Type: PAC METERS										
Asset GL Acct #: 334000-6000-001										
60000-001299	5/8 New Meter Exchanges: Pittsfield	9/1/2014	12/31/2019	9	13	4	125.59	4/13	38.64	86.95
60000-00199.41-001	5/8 Meters: Pittsfield - (6)	9/1/2005	6/30/2019	3	13	10	585.60	10/13	450.46	135.14
60000-0199.494	5/8 Meters: Pittsfield - (2)	9/1/2005	12/31/2019	3	13	10	195.26	10/13	150.20	45.06
60000-0199.494-003	5/8 Meters: Pittsfield - (2)	9/1/2005	3/1/2019	3	13	10	195.26	10/13	150.20	45.06
60000-0199.496	5/8 Meters: Pittsfield - (4)	9/1/2005	12/31/2019	3	13	10	390.52	10/13	300.40	90.12
Subtotal: 334000-6000-001							**1,492.23**		**1,089.90**	**402.33**
Asset Type: PAC RADIOS FOR METERING EQUIPMENT										
Asset GL Acct #: 334100-6000-001										
60000-001183	Neptune Radio Replacements: Pittsfield	4/13/2013	10/31/2019	6	13	7	81.40	7/13	43.83	37.57
60000-0199.513	Neptune Radio Installs: Pittsfield - (2)	9/1/2005	9/30/2019	12	13	1	190.01	1/13	14.62	175.39
60000-0199.513-005	Neptune Radio Installs: Pittsfield - (1)	9/1/2005	3/31/2019	3	13	10	95.00	10/13	73.08	21.92
60000-0199.513-006	Neptune Radio Installs: Pittsfield - (1)	9/1/2005	6/30/2019	3	13	10	95.01	10/13	73.08	21.93
60000-0199.595-001	Neptune Radio Installs: Pittsfield - (3)	9/1/2005	12/31/2019	9	13	4	293.16	4/13	90.20	202.96
Subtotal: 334100-6000-001							**754.58**		**294.81**	**459.77**
Asset Type: PAC SERVICES										
Asset GL Acct #: 333100-6000-001										
60000-000108.8	Catamount Road (#47): Pittsfield - 1 CT	7/1/1978	6/30/2019	4	13	9	115.56	9/13	80.00	35.56
Subtotal: 333100-6000-001							**115.56**		**80.00**	**35.56**
Subtotal: Barnstead							**4,555.83**		**2,896.53**	**1,659.30**
Grand Total							**4,555.83**		**2,896.53**	**1,659.30**

TAB 13

1604.08 Rate of Return Schedules

Pittsfield Aqueduct Company
Overall Rate of Return Proforma
For the Twelve Months Ended December 31, 2019

Schedule 1

Capital Component	Amount 12/31/19		Proforma		Proforma Amount 12/31/19	Proforma Component Ratio	Component Cost Rate 12/31/2019	Proforma Component Cost Rate		Profroma Average Cost Rate
Long-term Debt (3)	1,312,186	(3)	-		1,312,186	64.58%	3.25%	3.25%		2.10%
Intercompany Debt (3)	14,674		-		14,674	0.72%	3.31%	3.31%	(1)	0.02%
Preferred Stock	-					0.00%	0.00%	0.00%		0.00%
Common Equity	1,768,307		(1,063,241)	(4)	705,066	34.70%	4.85%	4.85%	(2)	1.68%
Overall Rate of Return	$ 3,095,167				$ 2,031,926	100.00%				**3.81%**

Notes:
(1) The interest reflected is the effective interest rates for 2019 per Schedule F-35 of the Annual Report. –
(2) The return on equity based on methodolog used in Order 25,292 in DW 11-026 is as follows:

Average prior 12 mos (Aug 2019-Jul 2020) 30 year Treasury bonds	1.85%
Plus 3.0%	3.00%
Total	4.85%

(3) Inclusive of 2018 pcp/PAC LONG term intercompany approved in DW18-033
(4) Per Order 25,292 in DW 11-026, eliminate the MARA and related equity per Schedule 2 as required by DW11-026

Pittsfield Aqueduct Company
Capital Structure for Ratemaking Purposes
For the Twelve Months Ended December 31, 2019

Schedule 2

		Test Year	Pro Forma Adjustments		Pro Forma Test Year	Component Ratio
Long-term Debt		1,312,186	-		1,312,186	**64.58%**
Intercompany Debt	$	14,674	-		14,674	**0.72%**
Common Equity:						
Common Stock		100	(100)		-	
Paid In Capital		1,899,596	(1,063,241)	(1)	836,355	
Comprehensive Income		-	-		-	
Retained Earnings		(131,389)			(131,389)	
Total Common Equity		1,768,307			704,966	**34.70%**
Total Capital	$	3,095,167			$ 2,031,826	100.00%

Notes:

(1) Per Order 25,292 in DW 11-026, eliminate the MARA and related equity:

Equity as of 1/25/´	826,112
Paid in Capital as of 1/25/12	237,129
	1,063,241

Pittsfield Aqueduct Company
Historical Capital Structure
For the Twelve Months Ended December 31, 2015 - 2019

Schedule 3

	2019	2018	2017	2016	2015
Bonds	-	-	-	-	-
Intercompany Note	1,147,728	1,172,125	776,850	776,850	776,850
Other LTD	164,458	168,331	171,163	58,117	-
Long-term Debt	$ 1,312,186	$ 1,340,456	$ 948,013	$ 834,967	$ 776,850
Intercompany Debt	14,674	85,570	423,622	443,407	465,569
Common Equity:					
Common Stock	100	100	100	100	100
Paid In Capital	1,899,596	1,935,318	2,064,824	2,185,204	2,224,208
Comprehensive Income	-	-	-	-	-
Retained Earnings	(131,389)	(137,454)	(23,553)	3,028	52,358
Total Common Equity	$ 1,768,307	$ 1,797,964	$ 2,041,371	$ 2,188,332	$ 2,276,666
Total Capital	$ 3,095,167	$ 3,223,990	$ 3,413,005	$ 3,466,706	$ 3,519,085
Long-term Debt	42.39%	41.58%	27.78%	24.09%	22.08%
Total Common Equity	57.13%	55.77%	59.81%	63.12%	64.69%
Intercompany Debt	0.47%	2.65%	12.41%	12.79%	13.23%
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%

Pittsfield Aqueduct Company
Historical Capitalization Ratios
For the Twelve Months Ended December 31, 2015 - 2019

Schedule 4

	2019	2018	2017	2016	2015
Long-term Debt	42.39%	41.58%	27.78%	24.09%	22.08%
Total Common Equity	57.13%	55.77%	59.81%	63.12%	64.69%
Intercompany Debt	0.47%	2.65%	12.41%	12.79%	13.23%
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%

Pittsfield Aqueduct Company
Weighted Average Cost of Long-Term Debt
For the Twelve Months Ended December 31, 2019

Schedule 5

Holder	Term	Maturity	Coupon Rate	Outstanding Balance as of 12/31/19	New Debt Added in 2020	Annual Interest (1)	Annual Amortization Issue Costs	All In Annual Cost	Effective Rate	2019 TY Principal Payments*(9)*	2019 TY Interest Payments	2019 TY Principal and Interest Payments	2019 Pro Form Adj to 2019 TY Principal	2019 Pro Form Adj to 2019 TY Interest	2019 TY Pro Form Principal and Interest Payments	2020 Principal Payments	2020 Interest Payments	2020 Principal and Interest Payments
SRF Catamount Road	30	04/30/48	3.168%	164,458		5,210	673	5,883	3.58%	$ 2,443	$ 3,265	$ 5,708	$ 113	$ (77)	$ 5,744	$ 2,556	$ 3,188	$ 5,744
Intercompany Loan from PCP (1)	30	05/31/48	3.200%	1,147,728	-	36,727	75	36,802	3.21%	$ 24,111	$ 37,973	$ 62,084	$ 0	$ -	$ 62,084	$ 24,111	$ 37,973	$ 62,084
TOTAL				**1,312,186**	**-**	**41,937**	**748**	**42,685**	3.25%	**$ 26,554**	**$ 41,238**	**$ 67,791**	**$ 113**	**$ (77)**	**$ 67,828**	**$ 26,667**	**$ 41,161**	**$ 67,828**

Notes:

(1) Intercompany debt aapproved in DW18-033 -	$ 1,186,000	
Loan Term -	30	Year
Loan Interest Rate -	3.20%	
Annual P&I -	$62,084	

Pittsfield Aqueduct Company
Short-Term and Long-Term Intercompany Debt
For the Thirteen Months Ended December 31, 2019

Schedule 6

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	13 Month Average
NOTE PAYABLE - PCP 2018 1.1M LOAN	1,147,728	1,145,660	1,143,586	1,141,506	1,139,421	1,137,331	1,135,234	1,133,133	1,131,025	1,128,912	1,126,794	1,124,669	1,122,540	1,135,195
NOTE PAYABLE - PCP 2018 1.1M LOAN-CURRENT PORTION	24,396	24,462	24,527	24,592	24,658	24,723	24,789	24,856	24,922	24,988	25,055	25,122	25,189	24,791
TOTAL LONG TERM INTERCOMPANY DEBT	1,172,125	1,170,121	1,168,113	1,166,098	1,164,079	1,162,054	1,160,024	1,157,988	1,155,947	1,153,901	1,151,849	1,149,791	1,147,728	1,159,986
INTERCO PAY/REC: PAC/PCP	72,615	(2,878)	5,839	(50,214)	(100,125)	(160,809)	(105,101)	(173,857)	(203,044)	(260,915)	(339,032)	(368,432)	1,719	(129,556)
INTERCO PAY/REC: PAC/TSC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	(63)	(63)	(63)	(64)	(64)	(64)	(64)	-	(34)
AP INTERCO PAY/REC:PEU/PAC	-	335	335	335	335	335	335	3,099	4,699	4,460	6,674	12,977	-	2,609
INTERCO PAY/REC: PAC/PWW	-	25,931	48,422	92,458	114,971	141,261	168,609	199,694	226,148	249,157	275,416	311,404	-	142,575
INTERCO LOAN PWW/PAC: RSF	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955
INTERCO PAY/REC: PAC/PEU	-	0	1	2	3	4	1,006	1,003	1,014	1,027	1,070	1,091	-	478
INTERCO ADV-PCP PROM NOTE 5/18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO LOAN PAC - INTERGRATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY SHORT TERM DEBT	85,570	36,343	67,551	55,535	28,138	(6,318)	77,740	42,830	41,708	6,621	(42,981)	(30,069)	14,674	29,026
TOTAL INTERCOMPANY DEBT	1,257,695	1,206,464	1,235,664	1,221,634	1,192,217	1,155,736	1,237,764	1,200,818	1,197,655	1,160,521	1,108,868	1,119,722	1,162,402	1,189,012

Pittsfield Aqueduct Company
Weighted Average Cost of Preferred Stock
For the Twelve Months Ended December 31, 2012

Schedule 7

Security	Term	Maturity	Rate	Outstanding Balance	Annual Dividends	Annual Amortization	All In Annual Cost	Effectve Rate

NOT APPLICABLE

Pittsfield Aqueduct Company
Return on Common Equity
For the Twelve Months Ended December 31, 2019

Schedule 8

Source: 30 yr treasury rates used by S&P

Date	Open	High	Low		Close
Aug 2019					2.1200%
Sept 2019					2.1600%
Oct 2019					2.1900%
Nov 2019					2.2800%
Dec 2019					2.3000%
Jan 2020					2.2200%
Feb 2020					1.9700%
Mar 2020					1.4600%
Aprl 2020					1.2700%
May 2020					1.3800%
Jun 2020					1.4900%
Jul 2020					1.3100%
	30 year Treasury bonds			Average	1.8458%
				Plus	3.0000%
				Cost of Equity	4.8458%

Used rates in the 12 months prior to the rate filing

TAB 14

Permanent Rate Tariff Pages

NHPUC NO. 5 WATER ~~Ninth~~ Tenth Revised Page 38

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding ~~Eight~~ Ninth Revised Page 38

GENERAL SERVICE – METERED
TOWN OF PITTSFIELD
SCHEDULE GM

Application:
This schedule is applicable to all metered water service in the Town of Pittsfield, NH, except municipal and private fire protection.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:
A minimum customer charge shall be made for each customer to whom service is rendered under this tariff, based on the meter size shown below:

Size	Monthly Minimum Charge
5/8"	$ ~~24.49~~ 27.23
3/4"	~~34.89~~ 38.79
1"	~~52.69~~ 58.58
1 1/2"	~~95.~~09 105.72
2"	~~147.~~10 163.55
3"	~~273.~~29 303.84
4"	~~447.~~87 497.94
6"	~~893.~~36 993.24
8"	~~1,485.85~~1,651.97

Volumetric Rate:
In addition to the minimum charge, the volumetric charge, based on usage shall be:

Volumetric Charge 7.20~~6.48~~ per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22,2014~~November 16, 2020 Issued by: Donald L. Ware ~~Donald L. Ware~~

Effective: ~~July 22,2014~~December 17, 2020 Title: Chief Operating Officer

~~Authorized by NHPUC Order No. 25,695 Docket No. DW 13-128, dated July 22, 2014.~~

NHPUC NO. 5 WATER — Tenth ~~Ninth~~ Revised Page 39

PITTSFIELD AQUEDUCT COMPANY, INC. — Superseding ~~Eight~~ Ninth Revised Page 39

MUNICIPAL FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-M

Application:
This rate is applicable to municipal fire protection in the Town of Pittsfield.

Character of Service:
The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rate:
The monthly charge for municipal fire protection service shall be made up of two parts, as follows:

	Monthly Charge
1. Hydrant Charge	
For each hydrant connected to the distribution system	$105.54~~94.93~~ per month

2. Inch-Foot Charge

The number of "inch-foot" units in the distribution system is to be obtained by multiplying the number of linear feet of pipe of each diameter (6" and larger) by the diameter in inches. The total number of "inch-foot" units in the distribution system will be determined as of January 1st each year, and will be the basis for computing the "inch-foot" charge for the entire year with one-twelfth to be billed each month.

Charge for each inch-foot unit to be $0.22237~~0.20001~~ per year

Terms of Payment:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware ~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

~~Authorized by NHPUC Order No. 25,695 Docket No. DW 13-128, dated July 22, 2014.~~

NHPUC NO. 5 WATER ~~Ninth~~ Tenth Revised Page 40

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding Ninth ~~Eight~~ Revised Page 40

PRIVATE FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-P

Application:

This schedule is applicable to fire protection in the Town of Pittsfield other than municipal, such as private hydrants, fire hose outlets and sprinkler systems, connected to the Company's distribution system.

Character of Service:

The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rates - MONTHLY:	Monthly Charge
For each 4-inch connection or service	$ ~~67.68~~ 75.25
For each 6-inch connection or service	$ ~~194.21~~215.92
For each 8-inch connection or service	$ ~~412.47~~458.58

Terms of Payment:

Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

~~Authorized by NHPUC Order No. 25,695 Docket No. DW 13-128, dated July 22, 2014.~~

NHPUC NO 5 WATER ~~Proposed Third~~ Fourth Revised Page 44

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding ~~Second~~ Third Page 44

RATE SCHEDULE

GENERAL SERVICE – NON-METERED

TOWN OF PITTSFIELD

Pittsfield Aqueduct Company, Inc. (PAC) will charge current unmetered customers a monthly rate as specified below based on the average single family residential usage as specified below until such time as meters are installed.

Commercial, Industrial and Private Fire Protection customers will be charged an average Rate as calculated for a similar customer in PAC.

PAC will make every effort to install meters in a timely manner and in no such case should these rates remain in force for more than a twelve month period.

	~~**Temporary Rate**~~
5/8" Meter Charge	$~~24.49~~ 27.23 per month
Volumetric Charge	$ ~~6.48~~ 7.20
Average Single Family Residential Usage	~~5.83~~ 5.19 CCF
	$ ~~37.78~~ 37.37
Total Monthly Charge	$ ~~62.27~~ 64.60
Annually	$ ~~747.24~~ 775.20

Issued: ~~July 22, 2014~~ November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~ December 17, 2020 Title: Chief Operating Officer

~~Authorized by NHPUC Order No. 25,695 Docket No. DW 13-128, dated July 22, 2014.~~

NHPUC NO. 5 WATER ~~Proposed Second~~ Third Revised 46

PITTSFIELD AQUEDUCT COMPANY, INC. Superseding ~~First~~ Second Page 46

GENERAL SERVICE – METERED
TOWN OF PITTSFIELD FIRE DEPARTMENT
SCHEDULE GM

Application:
This schedule is applicable to metered water service for the Fire Department in the Town of Pittsfield, NH.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:

The Fire Department for the Town of Pittsfield shall be charged only for usage over 14 ccf of water per month. There will be no charge for the monthly customer charge.

Volumetric Rate:
The volumetric charge based on usage over 14 ccf shall be:

Volumetric Charge: $7.20~~6.48~~ per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: ~~July 22, 2014~~November 16, 2020 Issued by: Donald L. Ware
~~Donald L. Ware~~

Effective: ~~July 22, 2014~~December 17, 2020 Title: Chief Operating Officer

~~Authorized by NHPUC Order No. 25,695 Docket No. DW 13-128, dated July 22, 2014.~~

GENERAL SERVICE – METERED
TOWN OF PITTSFIELD
SCHEDULE GM

Application:
This schedule is applicable to all metered water service in the Town of Pittsfield, NH, except municipal and private fire protection.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:
A minimum customer charge shall be made for each customer to whom service is rendered under this tariff, based on the meter size shown below:

Size	Monthly Minimum Charge
5/8"	$ 27.23
3/4"	38.79
1”	58.58
1 1/2"	105.72
2"	163.55
3"	303.84
4"	497.94
6"	993.24
8"	1,651.97

Volumetric Rate:
In addition to the minimum charge, the volumetric charge, based on usage shall be:

Volumetric Charge $7.20 per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

MUNICIPAL FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-M

Application:
This rate is applicable to municipal fire protection in the Town of Pittsfield.

Character of Service:
The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rate:
The monthly charge for municipal fire protection service shall be made up of two parts, as follows:

	Monthly Charge
1. Hydrant Charge	
For each hydrant connected to the distribution system	$105.54 per month

2. Inch-Foot Charge

The number of "inch-foot" units in the distribution system is to be obtained by multiplying the number of linear feet of pipe of each diameter (6" and larger) by the diameter in inches. The total number of "inch-foot" units in the distribution system will be determined as of January 1st each year, and will be the basis for computing the "inch-foot" charge for the entire year with one-twelfth to be billed each month.

Charge for each inch-foot unit to be $0.22237 per year

Terms of Payment:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

PRIVATE FIRE PROTECTION SERVICE
TOWN OF PITTSFIELD
SCHEDULE FP-P

Application:

This schedule is applicable to fire protection in the Town of Pittsfield other than municipal, such as private hydrants, fire hose outlets and sprinkler systems, connected to the Company's distribution system.

Character of Service:

The Company will exercise due effort to maintain at all times the normal pressures on the distribution system, but the Company shall not be held liable for the failure of either the supply or distribution division of its system to furnish its normal quantity of water at adequate pressure when such failure is due to the elements, natural causes, breaks, leaks, unusual or recurrent drafts, or the excess or unlawful use of water.

Rates - MONTHLY:	Monthly Charge
For each 4-inch connection or service	$ 75.25
For each 6-inch connection or service	$ 215.92
For each 8-inch connection or service	$ 458.58

Terms of Payment:

Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

RATE SCHEDULE

GENERAL SERVICE – NON-METERED

TOWN OF PITTSFIELD

Pittsfield Aqueduct Company, Inc. (PAC) will charge current unmetered customers a monthly rate as specified below based on the average single family residential usage as specified below until such time as meters are installed.

Commercial, Industrial and Private Fire Protection customers will be charged an average Rate as calculated for a similar customer in PAC.

PAC will make every effort to install meters in a timely manner and in no such case should these rates remain in force for more than a twelve month period.

5/8" Meter Charge	$ 27.23 per month
Volumetric Charge	$ 7.20
Average Single Family Residential Usage	5.19 CCF
	$ 37.37
Total Monthly Charge	$ 64.60
Annually	$ 775.20

Issued: November 16, 2020 — Issued by: Donald L. Ware

Effective: December 17, 2020 — Title: Chief Operating Officer

GENERAL SERVICE – METERED
TOWN OF PITTSFIELD FIRE DEPARTMENT
SCHEDULE GM

Application:
This schedule is applicable to metered water service for the Fire Department in the Town of Pittsfield, NH.

Character of Service:
Service shall consist of the production, treatment, and distribution of water for all residential, commercial and industrial requirements of customers whose premises abut any public street, road or way in which the Company has mains; provided, however, that such service shall only be rendered pursuant to the Terms and Conditions prescribed in other sections of this Tariff and the Rules of the New Hampshire Public Utilities Commission for Water Service.

Rates:

The Fire Department for the Town of Pittsfield shall be charged only for usage over 14 ccf of water per month. There will be no charge for the monthly customer charge.

Volumetric Rate:
The volumetric charge based on usage over 14 ccf shall be:

Volumetric Charge: $7.20 per 100 cu. ft.

Terms of Payments:
Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: November 16, 2020 Issued by: Donald L. Ware

Effective: December 17, 2020 Title: Chief Operating Officer

TAB 15

Summary of Puc 1604.01(a) 'Contents of a Full Rate Case' Documents

Summary (Index) of Full Rate Case Schedules per Puc 1604.01(a)

TAB	Document	Authority	
16	Internal Financial Reports	Puc 1604.01(a)(1)	
17	Annual Reports to Stockholders	Puc 1604.01(a)(2)	Data Not Exist
18	Federal Income Tax Reconciliation	Puc 1604.01(a)(3)	
19	Detailed Tax Factor Computation	Puc 1604.01(a)(4)	
20	Detailed Charitable Contribution	Puc 1604.01(a)(5)	Data Not Exist
21	List of Advertising	Puc 1604.01(a)(6)	Data Not Exist
22	Most Recent Cost of Service Study	Puc 1604.01(a)(7)	
23	Most Recent Construction Budget	Puc 1604.01(a)(8)	
24	Chart of Accounts if Different than NHPUC	Puc 1604.01(a)(9)	Data Not Exist
25	Securities and Exchange Commission 10K and 10Q	Puc 1604.01(a)(10)	Data Not Exist
26	Membership Fees, Dues and Lobbying Expenses	Puc 1604.01(a)(11)	
27	Depreciation Study	Puc 1604.01(a)(12)	
28	Management and Financial Audits	Puc 1604.01(a)(13)	
29	Officer and Director Compensation	Puc 1604.01(a)(14)	Data Not Exist, See Tab 33
30	Officer and Executive Incentive Plans	Puc 1604.01(a)(15)	Data Not Exist
31	List of Amount of Voting Stock	Puc 1604.01(a)(16)	Data Not Exist
32	Payments for Contractual Services in Excess of $50,000	Puc 1604.01(a)(17)	
33	Amount of Assets and Costs Allocated to Non-Utility Operations	Puc 1604.01(a)(18)	
34	Balance Sheets and Income Statements for Previous Two Years	Puc 1604.01(a)(19)	
35	Quarterly Income Statements for Previous Two Years	Puc 1604.01(a)(20)	
36	Quarterly Sales Volumes	Puc 1604.01(a)(21)	
37	Projected Need for External Capital	Puc 1604.01(a)(22)	
38	Capital Budget - Sources and Uses	Puc 1604.01(a)(23)	
39	Outstanding Short-Term Debt on Monthly Basis for Each Indebtedness	Puc 1604.01(a)(24)	See Tab 13
40	Certificate of Details of Management Fee Information	Puc 1604.01(a)(25)	See Tabs 3 and 33

TAB 16

1604.01(a)(1) Internal Financial Reports for the first and last month of the test year; for the entire test year; and for the 12 months or 5 quarters prior to the test year.

PITTSFIELD AQUEDUCT
Profit and Loss Statement
January - December 2018

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total 2018
WATER SALES	58,394.71	44,269.22	56,034.50	54,365.32	48,460.88	56,518.10	59,832.11	49,624.81	54,389.32	46,758.82	54,217.60	58,963.27	641,828.66
CBFRR REVENUES	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	146,559.00
MISC OPERATING REVENUE	171.00	580.00	226.00	66.00	132.00	344.00	192.00	601.00	161.00	252.00	325.00	121.00	3,171.00
TOTAL REVENUES	70,778.96	57,062.47	68,473.75	66,644.57	60,806.13	69,075.35	72,237.36	62,439.06	66,763.57	59,224.07	66,755.85	71,297.52	791,558.66
PRODUCTION EXPENSES	13,059.18	7,357.20	13,140.51	6,415.20	8,473.86	6,641.67	8,657.13	18,528.22	11,670.85	13,040.88	13,827.39	7,477.64	128,289.73
TRANSMISSION AND DISTRIB EXP	6,570.42	2,147.10	3,210.88	5,732.28	6,699.67	7,536.33	14,487.27	12,641.60	2,704.69	7,716.14	3,663.99	700.85	73,811.22
CUSTOMER ACCT & COLLECTION EXP	223.17	737.19	828.64	1,672.26	651.59	952.91	2,160.49	1,170.13	604.95	599.61	1,566.52	1,384.84	12,552.30
ADMINISTRATIVE & GENERAL EXP	1,764.14	4,397.96	1,851.25	1,770.53	1,567.72	1,770.63	1,862.51	1,917.80	1,878.64	2,028.41	1,641.70	1,527.05	23,978.34
INTERCO MGMT FEE: PWW	15,908.00	14,926.00	15,261.00	14,200.00	16,372.00	14,730.00	17,336.00	15,862.00	13,076.00	15,150.00	15,434.00	10,425.00	178,680.00
INTERCOMPANY MGMT FEE: PCP	510.00	369.00	614.00	413.00	347.00	320.00	249.00	488.00	443.00	394.00	675.00	(182.00)	4,640.00
TOTAL OPERATING EXPENSES	38,034.91	29,934.45	34,906.28	30,203.27	34,111.84	31,951.54	44,752.40	50,607.75	30,378.13	38,929.04	36,808.60	21,333.38	421,951.59
DEPRECIATION EXPENSE: PAC	8,492.61	8,499.38	8,497.51	8,496.53	8,499.85	8,500.86	8,505.84	8,506.34	8,413.77	8,489.51	8,469.30	8,464.88	101,836.38
AMORTIZATION EXPENSE: CIAC	(1,915.58)	(1,915.53)	(1,915.60)	(1,915.51)	(1,915.50)	(1,915.61)	(1,915.58)	(1,915.53)	(1,915.60)	(1,915.51)	(1,915.38)	(1,915.47)	(22,986.40)
AMORT: ACQUISITION PREMIUM	2,740.25	2,800.17	2,800.17	2,800.17	2,800.17	2,800.18	2,800.17	2,800.17	2,800.17	2,800.17	2,800.17	2,800.17	33,542.13
AMORT EXP - DEFERRED CHARGES	257.31	257.33	257.31	257.33	257.31	257.32	257.31	257.32	257.31	257.31	257.31	257.32	3,087.79
GAIN FROM FORGIVENESS SRF DEBT	-	-	-	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(1,072.71)
NH BET TAX	-	-	-	-	-	-	-	-	-	-	-	28,405.91	28,405.91
LOCAL PROPERTY TAXES	13,208.16	13,208.16	13,208.17	13,208.16	18,566.17	15,887.18	15,887.16	15,887.16	15,887.18	15,886.83	15,940.51	14,883.67	181,658.51
INCOME TAXES	1,967.23	450.01	2,180.57	2,950.53	175.74	2,976.68	335.02	(3,916.10)	2,802.53	(1,592.72)	982.14	101,525.37	110,837.00
TOTAL OPERATING DEDUCTIONS	62,784.89	53,233.97	59,934.41	55,881.29	62,376.39	60,338.96	70,503.13	72,107.92	58,504.30	62,735.44	63,223.46	175,636.04	857,260.20
NET OPERATING INCOME	7,994.07	3,828.50	8,539.34	10,763.28	(1,570.26)	8,736.39	1,734.23	(9,668.86)	8,259.27	(3,511.37)	3,532.39	(104,338.52)	(65,701.54)
INTEREST EXPENSE	(279.57)	(279.57)	(279.57)	(279.57)	(279.06)	(278.55)	(278.04)	(277.52)	(277.01)	(276.49)	(275.98)	(275.46)	(3,336.39)
AMORTIZATION OF DEBT EXPENSE	-	-	-	-	(55.95)	(62.18)	(62.70)	(62.35)	(62.35)	(62.35)	(62.35)	(62.33)	(492.56)
INTERCOMPANY INTEREST	(5,200.42)	(5,147.14)	(5,235.77)	(5,403.21)	(425.49)	(3,245.34)	(3,298.83)	(3,251.11)	(3,234.69)	(3,204.00)	(3,371.01)	(3,353.25)	(44,370.26)
TOTAL INTEREST EXPENSE, NET	(5,479.99)	(5,426.71)	(5,515.34)	(5,682.78)	(760.50)	(3,586.07)	(3,639.57)	(3,590.98)	(3,574.05)	(3,542.84)	(3,709.34)	(3,691.04)	(44,862.82)
NET INCOME (OR LOSS)	2,514.08	(1,598.21)	3,024.00	5,080.50	(2,330.76)	5,150.32	(1,905.34)	(13,259.84)	4,685.22	(7,054.21)	(176.95)	(108,029.56)	(113,900.75)

PITTSFIELD AQUEDUCT COMPANY
THIRTEEN MONTH BALANCE SHEET

	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	#REF!
ASSETS														
LAND	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19
STRUCTURES	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95
EQUIPMENT	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	134,908.33	134,908.33	134,908.33	130,169.56	133,885.91
TRANSMISSION & DISTRIBUTION	2,772,115.52	2,772,115.52	2,777,659.00	2,778,447.07	2,778,447.07	2,780,587.32	2,780,680.18	2,784,434.13	2,784,483.52	2,784,557.02	2,786,993.68	2,787,362.72	2,786,037.30	2,781,070.77
MISCELLANEOUS EQUIPMENT	120,254.36	120,254.36	120,254.36	120,254.36	120,254.36	120,254.36	119,818.30	119,818.30	119,818.30	109,773.86	109,773.86	109,773.86	109,773.86	116,928.96
INTANGIBLE PLANT	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
TOTAL PLANT IN SERVICE	4,654,735.70	4,654,735.70	4,660,279.18	4,661,067.25	4,661,067.25	4,663,207.50	4,662,864.30	4,666,618.25	4,666,667.64	4,657,647.00	4,660,083.66	4,660,452.70	4,654,388.51	4,660,293.43
ACCUMULATED DEPRECIATION	1,389,966.34	1,398,458.95	1,406,352.70	1,414,572.16	1,423,068.69	1,431,568.54	1,439,633.34	1,447,722.07	1,455,900.40	1,453,928.85	1,461,388.27	1,469,816.57	1,472,217.26	1,435,738.01
NET PLANT IN SERVICE	3,264,769.36	3,256,276.75	3,253,926.48	3,246,495.09	3,237,998.56	3,231,638.96	3,223,230.96	3,218,896.18	3,210,767.24	3,203,718.15	3,198,695.39	3,190,636.13	3,182,171.25	3,224,555.42
CWIP:CONTRACTOR CLEARING	827.50	827.50	827.50	827.50	827.50	827.50	827.50	827.50	827.50	1,860.70	5,673.70	5,673.70	6,707.50	2,104.85
TOTAL PLANT	3,265,596.86	3,257,104.25	3,254,753.98	3,247,322.59	3,238,826.06	3,232,466.46	3,224,058.46	3,219,723.68	3,211,594.74	3,205,578.85	3,204,369.09	3,196,309.83	3,188,878.75	3,226,660.28
CURRENT ASSETS														
ACCOUNTS RECEIVABLE, NET	46,208.41	18,308.29	17,379.77	47,762.30	17,365.11	17,131.20	23,676.68	10,488.97	9,223.63	44,638.56	15,079.18	47,643.74	41,108.16	27,385.69
PREPAID EXPENSES AND OTHER	37,225.73	27,519.38	15,627.61	3,720.93	3,569.23	4,260.20	46,280.68	31,709.82	17,639.62	3,225.42	3,059.06	58,955.67	42,757.32	22,734.67
A/R: UNBILLED WATER REVENUE	76,493.00	83,326.00	76,050.00	72,633.00	77,196.00	75,085.00	75,031.00	82,965.00	79,300.00	75,058.00	71,660.00	70,221.00	79,549.00	76,505.15
TOTAL CURRENT ASSETS	159,927.14	129,153.67	109,057.38	124,116.23	98,130.34	96,476.40	144,988.36	125,163.79	106,163.25	122,921.98	89,798.24	176,820.41	163,414.48	126,625.51
OTHER ASSETS														
UNAMORTIZED DEBT EXPENSE	20,207.67	20,207.67	20,207.67	20,207.67	21,803.67	22,389.72	22,327.54	22,264.84	22,202.49	22,140.14	22,077.79	22,015.44	21,953.11	21,538.88
DEFERRED CHARGES	20,306.66	20,049.35	19,792.02	19,534.71	19,277.38	19,020.07	18,762.75	18,505.44	18,248.12	17,990.81	17,733.50	17,476.19	17,218.87	18,762.76
ACQUISITION PREMIUM - MARA	1,254,116.97	1,251,376.72	1,248,576.55	1,245,776.38	1,242,976.21	1,240,176.04	1,237,375.86	1,234,575.69	1,231,775.52	1,228,975.35	1,226,175.18	1,223,375.01	1,220,574.84	1,237,371.26
TOTAL OTHER ASSETS	1,294,631.30	1,291,633.74	1,288,576.24	1,285,518.76	1,284,057.26	1,281,585.83	1,278,466.15	1,275,345.97	1,272,226.13	1,269,106.30	1,265,986.47	1,262,866.64	1,259,746.82	1,277,672.89
TOTAL ASSETS	**4,720,155.30**	**4,677,891.66**	**4,652,387.60**	**4,656,957.58**	**4,621,013.66**	**4,610,528.69**	**4,647,512.97**	**4,620,233.44**	**4,589,984.12**	**4,597,607.13**	**4,560,153.80**	**4,635,996.88**	**4,612,040.05**	**4,630,958.68**
EQUITY AND LIABILITIES														
COMMON STOCK	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
ADDITIONAL PAID IN CAPITAL	2,064,823.84	2,064,823.84	2,064,823.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,935,317.84	1,965,203.84
RETAINED EARNINGS BEG - PAC	-	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(23,553.03)	(21,741.26)
NET PROFIT (OR LOSS)	(23,553.03)	2,514.08	915.87	3,939.87	9,020.37	6,689.61	11,839.93	9,934.59	(3,325.25)	1,359.97	(5,694.24)	(5,871.19)	(113,900.75)	(8,163.86)
TOTAL EQUITY	2,041,370.81	2,043,884.89	2,042,286.68	1,915,804.68	1,920,885.18	1,918,554.42	1,923,704.74	1,921,799.40	1,908,539.56	1,913,224.78	1,906,170.57	1,905,993.62	1,797,964.06	1,935,398.72
LTD:SRF Catamount Road	169,800.69	169,403.69	169,204.69	169,004.69	125,821.69	125,618.69	125,406.69	125,202.69	124,997.69	124,791.69	124,585.69	124,378.69	124,170.69	138,645.23
FORGIVABLE DEBT: CATAMOUNT ROAD	-	-	-	-	41,240.53	41,121.34	41,002.15	40,882.96	40,763.77	40,644.58	40,525.39	40,406.20	40,287.01	28,221.07
TOTAL LONG TERM DEBT	169,800.69	169,403.69	169,204.69	169,004.69	167,062.22	166,740.03	166,408.84	166,085.65	165,761.46	165,436.27	165,111.08	164,784.89	164,457.70	166,866.30
CURRENT LIABILITIES														
INTERCO ADV-PCP PROM NOTE 5/18	776,850.00	776,850.00	776,850.00	776,850.00	776,850.00	-	-	-	-	-	-	-	-	298,788.46
NOTE PAYABLE - PCP 2018 1.1M LOAN	-	-	-	-	-	1,186,000.00	1,184,033.61	1,182,061.98	1,180,085.09	1,178,102.93	1,176,115.48	1,174,122.73	1,172,124.67	725,588.19
CURRENT PORTION LTD: SRF CATAMOUNT ROAD	1,362.00	1,759.00	1,958.00	2,158.00	2,359.00	2,369.00	2,387.00	2,396.00	2,406.00	2,416.00	2,425.00	2,434.00	2,443.00	2,220.92
FORGIVABLE DEBT: STD CATAMOUNT ROAD	-	-	-	-	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	990.19
INTERCO DIV PAY/REC PAC/PCP	410,666.98	334,684.54	278,961.03	378,696.01	308,218.02	(157,412.39)	(116,875.14)	(185,912.61)	(241,545.16)	(253,874.94)	(338,651.92)	(268,502.39)	72,615.09	17,005.16
INTERCO PAY/REC: PAC/PWW	-	33,919.26	66,197.40	98,087.59	122,599.30	155,201.71	184,426.54	227,382.64	262,456.67	287,435.24	321,691.08	348,213.29	-	162,123.90
INTERCO LOAN PWW/PAC: RSF	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74
INTERCO PAY/REC: PAC/PEU	-	-	-	-	-	(58.56)	41.42	1,266.61	1,603.19	5,198.15	5,210.06	10,227.73	-	1,806.82
HARDSHIP CASES: CREDITS	(48.97)	(48.97)	(48.97)	(48.97)	-	-	-	-	-	-	-	-	-	(15.07)
ACCOUNTS PAYABLE & ACCR EXP	7,939.93	7,140.97	8,596.02	9,938.43	17,058.02	35,068.06	1,235.15	4,918.54	12,357.61	3,264.60	27,593.86	6,149.80	4,530.48	11,214.73
TOTAL CURRENT LIABILITIES	1,209,724.68	1,167,259.54	1,145,468.22	1,278,635.80	1,241,469.36	1,235,552.84	1,269,633.60	1,246,498.18	1,231,748.42	1,236,927.00	1,208,768.58	1,287,030.18	1,266,098.26	1,232,678.05
OTHER DEFERRED CREDITS														
CONTRIBUTIONS IN AID OF CONST	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41
RESERVE FOR AMORT OF CIAC:PAC	(451,821.06)	(453,736.64)	(455,652.17)	(457,567.77)	(459,483.28)	(461,398.78)	(463,314.39)	(465,229.97)	(467,145.50)	(469,061.10)	(470,976.61)	(472,891.99)	(474,807.46)	(463,314.36)
DEFERRED INCOME TAXES	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	401,226.77	508,474.08	409,476.56
	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00
TOTAL DEFERRED CREDITS	1,299,259.12	1,297,343.54	1,295,428.01	1,293,512.41	1,291,596.90	1,289,681.40	1,287,765.79	1,285,850.21	1,283,934.68	1,282,019.08	1,280,103.57	1,278,188.19	1,383,520.03	1,296,015.61
TOTAL LIABILITIES AND EQUITY	**4,720,155.30**	**4,677,891.66**	**4,652,387.60**	**4,656,957.58**	**4,621,013.66**	**4,610,528.69**	**4,647,512.97**	**4,620,233.44**	**4,589,984.12**	**4,597,607.13**	**4,560,153.80**	**4,635,996.88**	**4,612,040.05**	**4,630,958.68**
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PITTSFIELD AQUEDUCT
Profit and Loss Statement
January - December 2019

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total 2019
WATER SALES	45,658.28	49,501.00	53,484.04	54,027.41	48,594.97	52,436.55	51,352.46	59,488.60	55,654.33	48,881.22	52,248.13	53,988.18	625,315.17
CBFRR REVENUES	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	146,559.00
MISC OPERATING REVENUE	121.00	20.00	202.00	310.00	135.00	315.00	112.00	201.00	478.00	218.00	324.00	227.00	2,663.00
TOTAL REVENUES	57,992.53	61,734.25	65,899.29	66,550.66	60,943.22	64,964.80	63,677.71	71,902.85	68,345.58	61,312.47	64,785.38	66,428.43	774,537.17
PRODUCTION EXPENSES	13,605.80	11,570.15	9,928.72	8,321.49	13,542.40	7,967.34	10,385.27	9,010.13	8,525.11	11,177.68	14,259.56	13,022.47	131,316.12
TRANSMISSION AND DISTRIB EXP	3,114.49	4,478.79	2,963.20	1,474.65	3,865.64	12,563.12	7,407.61	4,093.93	1,255.10	6,245.54	11,451.85	2,265.30	61,179.22
CUSTOMER ACCT & COLLECTION EXP	855.14	642.23	1,092.36	571.11	1,124.63	1,371.54	3,029.08	1,075.01	943.65	1,184.27	1,857.25	1,847.97	15,594.24
ADMINISTRATIVE & GENERAL EXP	1,443.43	1,748.01	1,494.48	1,492.44	1,500.57	1,496.68	10,461.86	1,324.99	1,413.74	1,474.97	1,475.29	1,462.62	26,789.08
INTERCO MGMT FEE: PWW	12,366.00	10,361.00	22,921.00	13,798.00	13,746.00	12,941.00	13,635.00	13,145.00	12,020.00	13,510.00	15,713.00	15,863.00	170,019.00
INTERCOMPANY MGMT FEE: PCP	379.00	419.00	500.00	406.00	398.00	370.00	276.00	342.00	332.00	317.00	412.00	367.00	4,518.00
TOTAL OPERATING EXPENSES	31,763.86	29,219.18	38,899.76	26,063.69	34,177.24	36,709.68	45,194.82	28,991.06	24,489.60	33,909.46	45,168.95	34,828.36	409,415.66
DEPRECIATION EXPENSE: PAC	8,468.02	8,467.71	8,474.61	8,473.60	8,474.06	8,468.00	8,466.34	8,494.65	8,496.77	8,516.95	8,405.47	8,365.98	101,572.16
AMORTIZATION EXPENSE: CIAC	(1,915.46)	(1,915.39)	(1,915.46)	(1,915.39)	(1,915.38)	(1,915.47)	(1,915.46)	(1,915.39)	(1,915.45)	(1,915.39)	(1,915.37)	(1,915.47)	(22,985.08)
AMORT: ACQUISITION PREMIUM	2,800.17	2,868.09	2,868.07	2,868.07	2,868.08	2,868.08	2,868.08	2,868.07	2,868.09	2,868.07	2,868.07	2,868.09	34,349.03
AMORT EXP - DEFERRED CHARGES	257.30	257.31	257.31	257.31	255.99	257.32	257.30	257.31	257.30	257.31	257.30	257.32	3,086.38
GAIN FROM FORGIVENESS SRF DEBT	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(1,430.28)
NH BET TAX	-	-	-	-	-	-	-	-	-	-	-	1,258.00	1,258.00
LOCAL PROPERTY TAXES	15,828.09	15,828.09	15,828.06	15,828.09	15,810.09	15,810.09	15,810.09	15,810.09	15,792.07	15,311.42	15,311.42	14,724.39	187,691.99
INCOME TAXES	25.82	1,746.68	236.89	3,893.08	215.04	604.63	(2,057.45)	4,569.23	4,842.20	536.43	(1,532.85)	449.30	13,529.00
TOTAL OPERATING DEDUCTIONS	57,108.61	56,352.48	64,530.05	55,349.26	59,765.93	62,683.14	68,504.53	58,955.83	54,711.39	59,365.06	68,443.80	60,716.78	726,486.86
NET OPERATING INCOME	883.92	5,381.77	1,369.24	11,201.40	1,177.29	2,281.66	(4,826.82)	12,947.02	13,634.19	1,947.41	(3,658.42)	5,711.65	48,050.31
INTEREST EXPENSE	(274.94)	(274.42)	(273.90)	(273.38)	(272.85)	(272.33)	(271.80)	(271.27)	(270.74)	(270.21)	(269.68)	(269.15)	(3,264.67)
AMORTIZATION OF DEBT EXPENSE	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(62.33)	(747.96)
INTERCOMPANY INTEREST	(3,277.86)	(3,247.85)	(3,268.34)	(3,209.20)	(3,131.21)	(3,187.22)	(3,246.49)	(3,179.50)	(3,132.30)	(3,038.68)	(3,004.62)	(3,049.73)	(37,973.00)
TOTAL INTEREST EXPENSE, NET	(3,615.13)	(3,584.60)	(3,604.57)	(3,544.91)	(3,466.39)	(3,521.88)	(3,580.62)	(3,513.10)	(3,465.37)	(3,371.22)	(3,336.63)	(3,381.21)	(38,720.96)
NET INCOME (OR LOSS)	(2,731.21)	1,797.17	(2,235.33)	7,656.49	(2,289.10)	(1,240.22)	(8,407.44)	9,433.92	10,168.82	(1,423.81)	(6,995.05)	2,330.44	6,064.68

PITTSFIELD AQUEDUCT COMPANY
THIRTEEN MONTH BALANCE SHEET

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	13 Month Average
ASSETS														
LAND	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19
STRUCTURES	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95
EQUIPMENT	130,169.56	130,169.56	130,169.56	130,169.56	130,169.56	130,169.56	130,169.56	131,490.46	131,490.46	131,490.46	131,490.46	131,490.46	131,490.46	130,719.94
TRANSMISSION & DISTRIBUTION	2,786,037.30	2,786,111.89	2,786,111.89	2,790,897.89	2,790,897.89	2,790,991.71	2,790,195.54	2,790,367.01	2,790,463.89	2,790,348.47	2,790,943.44	2,795,808.32	2,795,104.49	2,789,931.27
MISCELLANEOUS EQUIPMENT	109,773.86	109,773.86	109,773.86	109,773.86	109,773.86	109,773.86	109,773.86	109,773.86	115,098.03	115,233.10	115,233.10	115,233.10	113,039.64	111,582.35
INTANGIBLE PLANT	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
TOTAL PLANT IN SERVICE	4,654,388.51	4,654,463.10	4,654,463.10	4,659,249.10	4,659,249.10	4,659,342.92	4,658,546.75	4,660,039.12	4,665,460.17	4,665,479.82	4,666,074.79	4,670,939.67	4,668,042.38	4,660,641.35
ACCUMULATED DEPRECIATION	1,472,217.26	1,480,676.99	1,489,144.70	1,496,765.02	1,505,238.62	1,513,712.68	1,521,384.51	1,529,842.56	1,538,337.21	1,546,635.68	1,555,006.84	1,563,379.16	1,568,524.89	1,517,695.10
NET PLANT IN SERVICE	3,182,171.25	3,173,786.11	3,165,318.40	3,162,484.08	3,154,010.48	3,145,630.24	3,137,162.24	3,130,196.56	3,127,122.96	3,118,844.14	3,111,067.95	3,107,560.51	3,099,517.49	3,142,946.24
CWIP:CONTRACTOR CLEARING	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	12,031.67	6,842.57	6,707.50	6,176.50	6,176.50	6,176.50	7,073.94
TOTAL PLANT	3,188,878.75	3,180,493.61	3,172,025.90	3,169,191.58	3,160,717.98	3,152,337.74	3,143,869.74	3,142,228.23	3,133,965.53	3,125,551.64	3,117,244.45	3,113,737.01	3,105,693.99	3,150,020.18
CURRENT ASSETS														
ACCOUNTS RECEIVABLE, NET	41,108.16	19,658.82	48,066.73	40,742.86	39,362.86	16,748.64	46,025.06	25,162.40	49,243.72	40,626.13	18,847.91	50,983.40	25,308.33	36,381.39
PREPAID EXPENSES AND OTHER	42,757.32	29,104.98	14,959.13	1,963.35	2,611.69	59,047.69	45,018.41	30,962.76	17,096.77	2,869.48	2,473.41	55,932.51	41,124.00	25,399.79
A/R: UNBILLED WATER REVENUE	79,549.00	73,321.00	67,899.00	71,096.00	78,080.00	77,386.00	73,158.00	75,852.00	75,893.00	78,789.00	75,287.00	70,637.00	76,432.00	74,745.58
TOTAL CURRENT ASSETS	163,414.48	122,084.80	130,924.86	113,802.21	120,054.55	153,182.33	164,201.47	131,977.16	142,233.49	122,284.61	96,608.32	177,552.91	142,864.33	136,526.77
OTHER ASSETS														
UNAMORTIZED DEBT EXPENSE	21,953.11	21,890.78	21,828.45	21,766.12	21,703.79	21,641.46	21,579.13	21,516.80	21,454.47	21,392.14	21,329.81	21,267.48	21,205.15	21,610.30
DEFERRED CHARGES	17,218.87	16,961.57	16,704.26	16,446.95	16,189.64	15,933.65	15,676.33	6,447.69	6,190.38	5,933.08	5,675.77	5,418.47	5,161.15	12,066.39
ACQUISITION PREMIUM - MARA	1,220,574.84	1,217,774.67	1,214,906.58	1,212,038.51	1,209,170.44	1,206,302.36	1,203,434.28	1,200,566.20	1,197,698.13	1,194,830.04	1,191,961.97	1,189,093.90	1,186,225.81	1,204,862.66
TOTAL OTHER ASSETS	1,259,746.82	1,256,627.02	1,253,439.29	1,250,251.58	1,247,063.87	1,243,877.47	1,240,689.74	1,228,530.69	1,225,342.98	1,222,155.26	1,218,967.55	1,215,779.85	1,212,592.11	1,238,539.34
TOTAL ASSETS	**4,612,040.05**	**4,559,205.43**	**4,556,390.05**	**4,533,245.37**	**4,527,836.40**	**4,549,397.54**	**4,548,760.95**	**4,502,736.08**	**4,501,542.00**	**4,469,991.51**	**4,432,820.32**	**4,507,069.77**	**4,461,150.43**	**4,525,086.29**
EQUITY AND LIABILITIES														
COMMON STOCK	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
ADDITIONAL PAID IN CAPITAL	1,935,317.84	1,935,317.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,899,595.84	1,905,549.51
RETAINED EARNINGS BEG - PAC	(23,553.03)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(137,453.78)	(127,962.05)
NET PROFIT (OR LOSS)	(113,900.75)	(2,731.21)	(934.04)	(3,169.37)	4,487.12	2,198.02	957.80	(7,449.64)	1,984.28	12,153.10	10,729.29	3,734.24	6,064.68	(7,661.76)
TOTAL EQUITY	1,797,964.06	1,795,232.85	1,761,308.02	1,759,072.69	1,766,729.18	1,764,440.08	1,763,199.86	1,754,792.42	1,764,226.34	1,774,395.16	1,772,971.35	1,765,976.30	1,768,306.74	1,770,025.69
NOTE PAYABLE - PCP 2018 1.1M LOAN	1,147,728.22	1,145,659.78	1,143,585.80	1,141,506.31	1,139,421.27	1,137,330.67	1,135,234.49	1,133,132.73	1,131,025.36	1,128,912.37	1,126,793.74	1,124,669.47	1,122,539.53	1,136,250.02
LTD:SRF Catamount Road	124,170.69	123,961.69	123,752.69	123,542.69	123,331.69	123,119.69	122,906.69	122,693.69	122,479.69	122,264.69	122,048.69	121,831.69	121,614.69	123,008.69
FORGIVABLE DEBT: CATAMOUNT ROAD	40,287.01	40,167.82	40,048.63	39,929.44	39,810.25	39,691.06	39,571.87	39,452.68	39,333.49	39,214.30	39,095.11	38,975.92	38,856.73	39,631.47
TOTAL LONG TERM DEBT	1,312,185.92	1,309,789.29	1,307,387.12	1,304,978.44	1,302,563.21	1,300,141.42	1,297,713.05	1,295,279.10	1,292,838.54	1,290,391.36	1,287,937.54	1,285,477.08	1,283,010.95	1,298,890.17
CURRENT LIABILITIES														
ST NOTE PAYABLE - PCP 2018 1.1M LOAN	24,396.45	24,461.50	24,526.75	24,592.15	24,657.73	24,723.48	24,789.41	24,855.51	24,921.79	24,988.25	25,054.89	25,121.70	25,188.69	24,757.47
CURRENT PORTION LTD: SRF CATAMOUNT ROAD	2,443.00	2,453.00	2,462.00	2,471.00	2,480.00	2,490.00	2,500.00	2,509.00	2,518.00	2,527.00	2,537.00	2,547.00	2,556.00	2,494.75
FORGIVABLE DEBT: STD CATAMOUNT ROAD	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28	1,430.28
INTERCO DIV PAY/REC PAC/PCP	72,615.09	(2,878.21)	5,839.26	(50,214.08)	(100,124.60)	(160,808.66)	(105,101.02)	(173,857.37)	(203,044.26)	(260,914.56)	(339,032.03)	(368,431.58)	1,719.17	(140,496.00)
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	(63.08)	(63.24)	(63.40)	(63.55)	(63.70)	(63.83)	(63.95)	-	(37.06)
INTERCO PAY/REC: PAC/PWW	-	25,931.34	48,421.51	92,457.95	114,970.52	141,260.86	168,609.48	199,694.20	226,148.02	249,157.47	275,415.72	311,403.84	-	154,455.91
INTERCO LOAN PWW/PAC: RSF	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74	12,954.74
INTERCO PAY/REC: PAC/PEU	-	334.97	335.67	336.51	337.35	338.19	1,340.29	4,101.58	5,712.81	5,486.68	7,744.40	14,067.82	-	3,344.69
ACCOUNTS PAYABLE & ACCR EXP	4,530.48	7,891.10	12,035.52	7,391.97	25,979.66	88,547.28	9,360.62	10,928.00	5,702.66	3,357.65	21,504.47	94,136.12	3,580.92	24,280.46
TOTAL CURRENT LIABILITIES	118,370.04	72,578.72	108,005.73	91,420.52	82,685.68	110,873.09	115,820.56	82,552.54	76,280.49	38,923.81	7,545.64	93,165.97	47,429.80	83,185.23
OTHER DEFERRED CREDITS														
CONTRIBUTIONS IN AID OF CONST	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41	1,148,636.41
RESERVE FOR AMORT OF CIAC:PAC	(474,807.46)	(476,722.92)	(478,638.31)	(480,553.77)	(482,469.16)	(484,384.54)	(486,300.01)	(488,215.47)	(490,130.86)	(492,046.31)	(493,961.70)	(495,877.07)	(497,792.54)	(485,342.30)
DEFERRED INCOME TAXES	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	508,474.08	510,342.07	508,474.08
	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00	201,217.00
TOTAL DEFERRED CREDITS	1,383,520.03	1,381,604.57	1,379,689.18	1,377,773.72	1,375,858.33	1,373,942.95	1,372,027.48	1,370,112.02	1,368,196.63	1,366,281.18	1,364,365.79	1,362,450.42	1,362,402.94	1,372,985.19
TOTAL LIABILITIES AND EQUITY	**4,612,040.05**	**4,559,205.43**	**4,556,390.05**	**4,533,245.37**	**4,527,836.40**	**4,549,397.54**	**4,548,760.95**	**4,502,736.08**	**4,501,542.00**	**4,469,991.51**	**4,432,820.32**	**4,507,069.77**	**4,461,150.43**	**4,525,086.29**
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TAB 17

1604.01(a)(2) Annual Reports to Stockholders and statistical supplements, if any, for the most recent 2 years.

This data does not exist for PAC.

TAB 18

1604.01(a)(3) Federal Income Tax Reconciliation for the test year

Pittsfield Aqueduct Company, Inc.
Federal Income Tax Reconciliation
For the Twelve Months Ended December 31, 2019

Provided pursuant to NHPUC Rule 1604.01(3)

Net income per books for the test year	$	7,324
Addback provision for Federal and State income taxes		13,529
Pretax Book Income before permanent items		20,853
Permanent Items:		
50% meals & entertainment expenses		-
Amortization of Municipal Acquisition Regulatory Asset (MARA		34,349
Disqualifying Dispositions (ISO's)		-
		34,349
Taxable Income		55,202
NHBPT		11,593
Federal Income Tax		-
Amortization of Investment Tax Credit		-
Total Income Taxes	$	11,593

Note: The following are temporary differences (Schedule M-1 items) that are recorded in Deferred Income Taxes:

Accelerated depreciation/Amortization of CIAC	(2,129)
Book/Tax Difference on disposal of assets	-
Prior Year's Charitable Contributions	-
Prepaid Expenses	2
A/R Reserve	(715)
Deferred Debits	(4,829)
	(7,671)

TAB 19

1604.01(a)(4) Detailed NH and Fed Tax Factor Computations on the incremenet of revenue needed to produce a given increment of net operating income.

Computation of Detailed Tax Factor
Pittsfield Aqueduct, Inc.
December 31, 2019

Provided pursuant to NHPUC Rule 1604.01(4)

Taxable Income	100.00%
Less: NH Business Profits Tax	7.70%
Federal Taxable Income	92.30%
Federal Income Tax Rate	21.00%
Effective Federal Income Tax Rate	19.38%
Add: NH Business Profits Tax	7.70%
Effective Tax Rate	27.08%
Percent of Income Available if No Tax	100.00%
Effective Tax Rate	27.08%
Percent Used as a Divisor in Determining the Revenue Requirement	72.92%

TAB 20

1604.01(a)(5) Detailed Charitable Contributions charged in the test year above the line showing the donee, amount, and account charged. (contributions of $50 or more)

This data does not exist for PAC.

TAB 21

1604.01(a)(6) List of Advertising charges in the test year above the line showing expenditures by media, subject mattewr, and account charged. (expenditures of $50 or more)

This data does not exist for PAC.

TAB 22

1604.01(a)(7) Most Recent Cost of Service Study if not previously filed in an adjudicative proceeding.

Last COSS was filed in DW 08-052 and is attached.

Pittsfield Aqueduct Company, Inc.
Pittsfield Division

Report on
Cost of Service Allocations
and Rate Design

AUS Consultants

By

John R. Palko
Principal

155 Gaither Drive, Suite A
Mount Laurel, NJ 08054

May 2008

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Report on
Cost of Service Allocations
and Rate Design

Introduction

This report sets forth the procedures, findings, and results of a cost of service allocation and rate design study for the Pittsfield Division of Pittsfield Aqueduct Company, Inc. (PAC or the Company). As of the end of calendar year 2007, the Company provided water service to a total of 635 customers via its water system located in Pittsfield, New Hampshire.

This cost of service allocation and rate design study is based on the total pro forma revenue requirement for the twelve months ending December 31, 2007 as will be requested by the Company in its planned rate filing before the New Hampshire Public Utilities Commission.

Revenue Requirement

Every public utility must receive total revenues sufficient to ensure proper operation and maintenance, development and perpetuation of its system and facilities, and preservation of its financial integrity. Without adequate revenues, the public utility would not be able to provide safe and adequate service to its customers. The total revenue requirement of a public utility is synonymous with its total cost of service and represents the amount of monies which must be recovered from its customer base through a system of periodic rates and charges for utility service.

Cost of service allocation and rate design studies for investor-owned water utilities reporting to a regulatory authority are often conducted in conjunction with the processing of a rate relief application at which time it is usually necessary to develop a pro forma revenue requirement. Such is the case in the present study which is based on the pro forma operations for the test year ended December 31, 2007, as developed by the management of the Company.

For the purpose of this study, the total pro forma revenue requirement, as developed by the Company for the test year ended December 31, 2007, may be summarized as follows:

Item	Amount
Operation and Maintenance Expense	$396,029
Depreciation and Amortization	65,699
Taxes Other Than Income Tax	37,366
Net Operating Income	145,140
Income Taxes	17,205
Total Revenue Requirement	$661,439

As subsequently discussed herein, this study results in the allocation of the $661,439 revenue requirement to functional costs and rate elements. It is noted that some $5,372 of the revenue requirement is projected to be obtained from other revenue or miscellaneous service revenue leaving a net revenue requirement of $656,067 to be recovered from a schedule of rates and charges for water service. This is the revenue amount the Company is requesting in temporary rates to relieve its net operating losses.

Plant Investment

The Company maintains its plant investment accounts in accordance with the fixed capital reporting requirements of the New Hampshire Public Utilities Commission.

Under this system, the original cost and the depreciation expense for utility plant in service as of December 31, 2007 may be summarized as follows:

Plant in Service	Original Cost	Depreciation Expense
Source of Supply and Pumping	$198,584	$3,064
Water Treatment	948,654	22,684
Transmission and Distribution	2,458,491	44,587
General	81,192	2,789
Intangible	75,551	3,778
Total Utility Plant in Service	$3,762,472	$76,902

As subsequently discussed herein, the above original cost elements and depreciation expense elements are allocated to a group of functional costs. The results of these allocations then become an input into the allocation of the pro forma revenue requirement.

Cost of Service Allocation

The pro forma revenue requirement (or equivalently, the total cost of service) was allocated to three broad functional cost categories, namely Volume Cost, Customer Cost, and Direct Fire Cost. These allocations are set forth in detail on the accompanying Schedules P1 through P6.

The Volume Cost Component, in the study developed herein, encompasses all the volume related elements of the cost of service. That is, the Volume Cost Component includes both costs associated with serving customers under average load conditions and costs associated with meeting rate-of-use requirements in excess of average. Stated in another manner, volume costs comprise all costs other than customer costs or direct fire costs.

The Customer Cost Component includes those costs associated with connecting and serving customers irrespective of the volume of water used or the demand requirements imposed on the system. Customer costs generally comprise capital and operating costs related to services, meters, and customer installations and meter reading, billing, and collecting expenses. In the present study, a portion of the costs and expenses related to transmission and distribution mains and distribution reservoirs were also allocated to the Customer Cost Component.

The Direct Fire Cost Component includes those costs associated with the installation, operation, and maintenance of fire hydrants together with a portion of the costs and expenses related to transmission and distribution mains and distribution reservoirs.

The accompanying Schedule P1 sets forth the allocation of utility plant in service at December 31, 2007. The results of the utility plant allocation are used to allocate property insurance and property taxes.

The results of the utility plant allocation are also an input into the rate base allocation. The accompanying Schedule P2 sets forth the allocation of the rate base at December 31, 2007. The results of the rate base allocation are used to allocate capital related elements of the revenue requirement such as net operating income and income taxes.

The accompanying Schedule P3 sets forth the allocation of the depreciation expense at December 31, 2007. The results of this allocation are used to allocate the pro forma depreciation and amortization expense.

The accompanying Schedule P4 sets forth in detail the allocation of the pro forma operation and maintenance expense. The results of this allocation become part of the revenue requirement allocation.

The accompanying Schedule P5 sets forth the allocation of the pro forma operating expense and other revenue requirements. Other revenue has been deducted from the revenue requirement allocations resulting in a net revenue requirement allocation. As shown on Schedule P5, the Volume Cost component accounts for 60.02% of the net revenue requirement while the Customer Cost Component accounts for 26.70% and the Direct Fire Cost Component accounts for 13.28%.

The right-most columns of Schedules P1 through P5 are headed "Allocation Code" and set forth the codes for the specific allocation factors used in this study. The allocation codes are simply reference numbers which designate groups of percentages which are used to allocate the total amount of any given cost element to the several cost functions. The accompanying Schedule P6 lists the allocation codes and percentage factors and contains a brief written description of the allocation bases.

Allocation of Mains and Distribution Reservoirs

As noted previously herein, portions of the costs and expenses related to transmission and distribution mains and distribution reservoirs were allocated to both the Customer Cost Component and the Direct Fire Cost Component in addition to being allocated to the Volume Cost Component. As shown by Allocation Code 04 on Schedule P6, 45% of the main costs and expenses were allocated to volume with 30% allocated to customer and 25% allocated to direct fire. These percentages were determined through an analysis of the inch-feet of mains in service at December 31, 2007.

The accompanying Schedule P7 sets forth the lengths of transmission and distribution mains in service as of December 31, 2007. As shown on Page 1 of Schedule P7, there were a total of 71,164 feet of transmission and distribution mains in service as of December 31, 2007. Page 1 of Schedule P7 illustrates both the reduction of all larger size mains to a 2" diameter and the calculation of inch-feet of mains. An inch-foot is simply the length of main in feet multiplied by the size of the diameter in inches. As shown on Page 1 of Schedule P7, there was an actual total of 484,910 inch-feet as of December 31, 2007. Under the reduction in size, there are only 142,328 inch-feet or about 30% of the actual number. This 30% is the customer cost portion of the mains. In essence, reducing the mains to 2" in diameter is similar to developing a minimum size system. This is also similar to the minimum size distribution system concept used in electric cost of service analyses.

Page 2 of Schedule P7 sets forth the methodology used to determine the direct fire cost portion of mains. All mains larger than 4" were reduced to the next smaller size. Generally, without fire protection, mains can be sized at least one size smaller. As shown on Page 2 of Schedule P7, this reduction results in 355,642 inch-feet which is 26.66% less than the actual number. That is, approximately 25% (26.66% rounded down) of the main size is directly related to fire protection. This 25% is the direct fire cost portion of the mains.

<u>Private Fire Protection/Municipal Fire Protection</u>

The Direct Fire Cost Component contains costs related to the provision of both private fire protection and municipal fire protection. The accompanying Schedule P8 sets forth the allocation of direct fire costs to private and municipal fire protection. The allocations are primarily based on the relative numbers of hydrants and the weighted fire protection units.

The accompanying Schedule P9 illustrates the development of the percentage factors used in the allocation of direct fire costs to private fire and municipal fire.

The accompanying Schedule P10 sets forth the calculation of the weighted fire protection units. As noted thereon, the weighting factors are based on the ratio of the cross-sectional area of a given service size to the cross-sectional area of a 6" service, with hydrants assumed to have 6" branches.

In addition to the direct fire costs, certain elements of both the volume cost and the customer cost are related to the provision of both private fire protection service and municipal fire protection service. The accompanying Schedule P11 illustrates the allocation of volume costs and customer costs to private fire and municipal fire.

Customer costs were allocated to fire based on the relative numbers of bills and the weighted number of services. The accompanying Schedule P12 shows the numbers of bills and the calculation of weighted services. Weighted services are based on the ratio of service diameters.

In order to allocate volume costs to fire, reference was made to the AWWA Water Rates Manual M1, Fourth Edition. Chapter 5 therein, "Rate Design for Small Water Utilities", indicates that it is appropriate and reasonable for a water utility with 635 customers to obtain approximately 30% of its revenues from fire protection charges. This recommendation was used as a guideline to allocate some of the volume costs to fire. As noted at the bottom of Schedule P11, a conservative approach was taken by setting fire protection revenue to 20% of the total revenue requirement; this resulted in $42,746 of volume costs being allocated to fire.

After allocating direct fire to private and municipal fire and allocating volume and customer costs to fire, the resulting allocation, as shown at the bottom of Schedule P11, indicates that 53.50% of the revenue requirement is attributable to volume costs, 26.50% is attributable to customer costs, 2.42% is attributable to private fire, and 17.58% is attributable to municipal fire. This information allows for the development of a rate design to generate the revenue requirement.

Revenues From Present Rates

Before designing a schedule of developed rates based on the allocations set forth herein, revenues under present rates were calculated. This calculation was based on the reported numbers of meters and fire protection units in service at December 31, 2007 together with the reported billable volumetric water usage during calendar year 2007.

The accompanying Schedule P13 sets forth the calculation of revenues under present rates. As shown on Page 3 of Schedule P13, 48.34% of present rate revenue is obtained from general water service volumetric charges, 20.38% is obtained from general water service customer (or minimum) charges, 4.65% is obtained from private fire protection charges, and 26.63% is obtained from municipal fire protection charges.

The Existing Pittsfield Division Rate Schedule

The present rate schedule used by the Company for general water service comprises a monthly minimum customer charge which varies by meter size together with a uniform volumetric usage charge applied to all water used.

With respect to private fire protection service, there is a monthly charge which varies by connection or service size.

With respect to municipal fire protection service, there are two parts to the total charge for service. At present, there is a $66.63 monthly charge per hydrant combined with an effective annual inch-foot charge of $0.14040 applied to mains 6" and larger in diameter. (It is noted that per Schedule FP-M of the tariff, the inch-foot charge is stated as $0.03510; however, this charge is billed four times per year, resulting in an effective annual $0.14040 inch-foot charge. It is suggested that the tariff language be modified to avoid any confusion or mis-interpretation in the billing procedures.)

The rates and charges presently set forth in the PAC tariff were used in the calculation of present rate revenues on Schedule P13 and may be found thereon.

Rate Design

The design of rates, based on the allocations set forth and discussed herein, is presented on the accompanying Schedule P14.

Page 1 of Schedule P14 addresses both municipal and private fire protection. As noted thereon, the present revenue from municipal fire protection is about 5.2% greater than the cost of service indications while the present revenue from private fire protection is about 33.4% greater than the cost of service indications. Therefore, no changes were developed for either municipal or private fire protection rates and charges.

Page 2 of Schedule P14 sets forth the rate design for the customer or minimum charges. As shown thereon, an increase of about 87.3% is indicated. The monthly rates for all meter sizes have been increased by this percentage.

Page 3 of Schedule P14 sets forth the design of the volumetric usage rate. The volumetric rate is the "balance wheel" in the rate design. It provides the remaining amount of the pro forma net revenue requirement after deducting the developed revenues from municipal fire protection, private fire protection and customer charges. The developed volumetric rate is about 54.2% greater than the existing volumetric rate.

Revenues from Developed Rates

The accompanying Schedule P15 sets forth the calculation of revenues under the developed rates. As shown on Page 3 of Schedule P15, 51.77% of developed rate revenue is obtained from general water service volumetric charges, 26.51% is obtained from general water service customer (or minimum) charges, 3.23% is obtained from private fire protection charges, and 18.49% is obtained from municipal fire protection charges. The developed rates, when applied to the billing parameters, generate $656,038 in revenue. This revenue amount is about $29 less than the net revenue requirement of $656,067. This difference is only 0.004% and is considered negligible.

Closure

The results of the studies set forth and discussed herein can provide guidelines to be utilized in restructuring the Company's rates and charges for service. However, it must be remembered that cost of service allocations are the products of analyses based in part on judgment and experience and as such, while their results are a substantial aid in the design of rates, they are not meant to be literal, exact "gospel truth" type answers. Seldom, if ever, are rates exactly in line with the costs of service at any given time nor is it usually possible to design rate structures which are in complete exact agreement with all aspects of a cost of service allocation study. Generally, minor differences will exist just as a matter of normal circumstances. In addition, attempts to exactly meet the cost of service indications in one rate adjustment can impose extremely large and undue burdens on individual customers or customer groups. Most rate consultants favor a process of gradually bringing deficiency in revenue generation in line with cost of service indications so as to avoid or ameliorate undue or abrupt changes in rate structure. Actual rate and tariff design, in addition to relying on the results of cost of service allocation analyses, should also include consideration of policy matters, impact and extent of rate changes, past historical practice, future planning, special customer characteristics and regulatory and contract requirements.

Pittsfield Aqueduct Company, Inc.
Pittsfield Division

Schedules P1 through P15

to Accompany

Report on
Cost of Service Allocations
and Rate Design

AUS Consultants

By

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Principal

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May 2008

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Utility Plant in Service at December 31, 2007

Acc't	Description	Total Cost	Volume	Customer	Direct Fire	Allocation Code
	Source of Supply and Pumping Plant					
303	Land and Land Rights	44,180	44,180	0	0	01
304	Structures and Improvements	71,250	71,250	0	0	01
305	Collecting and Impounding Reservoirs	48,493	48,493	0	0	01
306	Lake, River and Other Intakes	29,050	29,050	0	0	01
307	Wells and Springs	0	0	0	0	01
309	Supply Mains	4,551	4,551	0	0	01
310	Power Generation Equipment	0	0	0	0	01
311	Pumping Equipment	1,060	1,060	0	0	01
	Total Supply and Pumping Plant	198,584	198,584	0	0	
	Water Treatment Plant					
304	Structures and Improvements	934,998	934,998	0	0	01
320	Water Treatment Equipment	13,656	13,656	0	0	01
	Total Water Treatment Plant	948,654	948,654	0	0	
	Transmission and Distribution Plant					
330	Distribution Reservoirs	0	0	0	0	04
331	Transmission and Distribution Mains	2,086,126	938,757	625,838	521,531	04
333	Services	153,162	0	153,162	0	02
334	Meters and Meter Installations	140,371	0	140,371	0	02
335	Hydrants	77,338	0	0	77,338	03
	Subtotal Transmission and Distribution Plant	2,456,997	938,757	919,371	598,869	
	Percents Code 05	100.00%	38.21%	37.42%	24.37%	
339	Other Plant and Miscellaneous Equipment	1,494	571	559	364	05
	Total Transmission and Distribution Plant	2,458,491	939,328	919,930	599,233	
	Subtotal Above Plant	3,605,729	2,086,566	919,930	599,233	
	Percents Code 06	100.00%	57.87%	25.51%	16.62%	
	General Plant					
340	Office Furniture and Equipment	0	0	0	0	06
343	Tools Shop and Garage Equipment	9,688	5,606	2,471	1,611	06
344	Laboratory Equipment	3,939	2,279	1,005	655	06
346	Communication Equipment	28,612	16,558	7,299	4,755	06
347	Computer Equipment	25,899	14,988	6,607	4,304	06
348	Miscellaneous Equipment	13,054	7,554	3,330	2,170	06
	Total General Plant	81,192	46,985	20,712	13,495	
	Intangible Plant					
301	Organization	75,551	43,721	19,273	12,557	06
302	Franchise	0	0	0	0	06
	Total Intangible Plant	75,551	43,721	19,273	12,557	
	Total Utility Plant in Service	3,762,472	2,177,272	959,915	625,285	
	Percents Code 06	100.00%	57.87%	25.51%	16.62%	

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Rate Base at December 31, 2007

Acc't	Description	Total Cost	Volume	Customer	Direct Fire	Allocation Code
	Total Utility Plant in Service	3,762,472	2,177,272	959,915	625,285	
	Accumulated Depreciation					
	Organization	(18,888)	(10,930)	(4,818)	(3,140)	06
	Structures	(243,274)	(243,274)	0	0	01
	Pumping and Distribution Equipment	(5,901)	(5,901)	0	0	01
	Transmission and Distribution Mains	(503,944)	(226,775)	(151,183)	(125,986)	04
	Services	(59,462)	0	(59,462)	0	02
	Meters	(21,260)	0	(21,260)	0	02
	Hydrants	(17,247)	0	0	(17,247)	03
	Other Equipment	(44,990)	(26,036)	(11,477)	(7,477)	06
	Accumulated Depreciation - Loss	111,293	64,405	28,391	18,497	06
	Accumulated Depreciation - Cost of Removal	3,019	1,747	770	502	06
	Total Accumulated Depreciation	(800,654)	(446,764)	(219,039)	(134,851)	
	Contributions In Aid of Construction					
	CIAC - Mains	(750,286)	(337,629)	(225,086)	(187,571)	04
	CIAC - Water Filtration	(398,350)	(398,350)	0	0	01
	Amortize CIAC - Mains	143,887	64,749	43,166	35,972	04
	Amortize CIAC - Water Filtration	76,393	76,393	0	0	01
	Total CIAC	(928,356)	(594,837)	(181,920)	(151,599)	
	Subtotal Above Rate Base Items	2,033,462	1,135,671	558,956	338,835	
	Additions to Rate Base					
	Working Capital	57,288	36,985	15,233	5,070	09
	Materials & Supplies	0	0	0	0	06
	Prepaid Insurance	6,738	3,899	1,719	1,120	06
	Prepaid Property Taxes	4,314	2,497	1,101	716	06
	Deferred Charges - Main Breaks	20,512	9,230	6,154	5,128	04
	Deferred Charges - Other Items	34,363	19,886	8,766	5,711	06
	Total Additions	123,215	72,497	32,973	17,745	
	Deductions from Rate Base					
	Customer Advances	0	0	0	0	04
	Customer Deposits	(86)	0	(86)	0	02
	Deferred Income Tax	(246,512)	(142,656)	(62,885)	(40,971)	06
	Total Deductions	(246,598)	(142,656)	(62,971)	(40,971)	
	Totakl Rate Base	1,910,079	1,065,512	528,958	315,609	
	Percents Code 13	100.00%	55.79%	27.69%	16.52%	

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Depreciation Expense - Pro Forma at December 31, 2007

Acc't Description	Total Cost	Volume	Customer	Direct Fire	Allocation Code
Source of Supply and Pumping Plant					
303 Land and Land Rights	0	0	0	0	01
304 Structures and Improvements	1,644	1,644	0	0	01
305 Collecting and Impounding Reservoirs	713	713	0	0	01
306 Lake, River and Other Intakes	582	582	0	0	01
307 Wells and Springs	0	0	0	0	01
309 Supply Mains	60	60	0	0	01
310 Power Generation Equipment	0	0	0	0	01
311 Pumping Equipment	65	65	0	0	01
Total Supply and Pumping Depreciation Exp.	3,064	3,064	0	0	
Water Treatment Plant					
304 Structures and Improvements	21,885	21,885	0	0	01
320 Water Treatment Equipment	799	799	0	0	01
Total Water Treatment Depreciation Exp.	22,684	22,684	0	0	
Transmission and Distribution Plant					
330 Distribution Reservoirs	0	0	0	0	04
331 Transmission and Distribution Mains	33,906	15,258	10,172	8,476	04
333 Services	3,090	0	3,090	0	02
334 Meters and Meter Installations	6,478	0	6,478	0	02
335 Hydrants	1,029	0	0	1,029	03
Subtotal Trans.and Dist.Depreciation Exp.	44,503	15,258	19,740	9,505	
339 Other Plant and Miscellaneous Equipment	84	32	31	21	05
Total Trans.and Dist.Depreciation Exp.	44,587	15,290	19,771	9,526	
Subtotal Above Depreciation Exp.	70,335	41,038	19,771	9,526	
General Plant					
340 Office Furniture and Equipment	0	0	0	0	06
343 Tools Shop and Garage Equipment	762	441	194	127	06
344 Laboratory Equipment	197	114	50	33	06
346 Communication Equipment	1,431	828	365	238	06
347 Computer Equipment	181	105	46	30	06
348 Miscellaneous Equipment	218	126	56	36	06
Total General Depreciation Exp.	2,789	1,614	711	464	
Intangible Plant					
301 Organization	3,778	2,186	964	628	06
302 Franchise	0	0	0	0	06
Total Intangible Depreciation Exp.	3,778	2,186	964	628	
Subtotal Utility Plant Depreciation Exp.	76,902	44,838	21,446	10,618	
Percents Code 07	100.00%	58.30%	27.89%	13.81%	
Add New Depreciation Rate Adjustment	(2,486)	(1,449)	(693)	(344)	07
Total Utility Plant Depreciation Exp. - Pro Forma	74,416	43,389	20,753	10,274	

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Operation and Maintenance Expense - Pro Forma at December 31, 2007

Acc't	Description	Total Cost	Volume	Customer	Direct Fire	Allocation Code
	Production Expenses					
	Total Supply, Pumping, and Water Treatment	71,496	71,496	0	0	01
	Transmission and Distribution Expenses					
662	Trans & Dist Lines Expense	418	188	125	105	04
663	Meter Expenses	1,391	0	1,391	0	02
664	Customer Installation Expenses	191	0	191	0	02
665	Miscellaneous Expenses	659	0	659	0	02
660	Operation Supervision and Engineering	10,197	3,896	3,816	2,485	05
673	Maintenance of Trans & Dist Mains	13,805	6,212	4,142	3,451	04
675	Maintenance of Services	10,462	0	10,462	0	02
676	Maintenance of Meters	130	0	130	0	02
677	Maintenance of Hydrants	4,614	0	0	4,614	03
678	Maintenance of Miscellaneous Equipment	2,913	1,113	1,090	710	05
	Total Transmission and Distribution O&M	44,780	11,409	22,006	11,365	
	Percents Code 08	100.00%	25.48%	49.14%	25.38%	
	Customer Accounts Expenses					
	Total Customer Accounts Expenses	12,136	0	12,136	0	02
	Subtotal Above O&M Expenses	128,412	82,905	34,142	11,365	
	Percents Code 09	100.00%	64.56%	26.59%	8.85%	
	Administrative and General Expenses					
924	Property Insurance	7,912	4,579	2,018	1,315	06
	All Other A&G Expense	12,935	8,351	3,439	1,145	09
	Total Administrative and General Expenses	20,847	12,930	5,457	2,460	
	Subtotal Above O&M Expenses	149,259	95,835	39,599	13,825	
	Percents Code 10	100.00%	64.21%	26.53%	9.26%	
	Inter Div Management Fee					
	Total Management Fee	246,770	150,628	64,210	31,932	11
	Total Operation and Maintenance Expenses	396,029	246,463	103,809	45,757	
	Percents	100.00%	62.23%	26.21%	11.56%	

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Pro Forma Operating Expense and Other Revenue Requirements

Acc't Description	Total Cost	Volume	Customer	Direct Fire	Allocation Code
Operation and Maintenance Expense					
Total Operating Expense	396,029	246,463	103,809	45,757	
Depreciation and Amortization					
Total Depreciation and Amortization	65,699	38,303	18,323	9,073	07
Taxes Other Than Income Taxes					
Total Other Taxes (Property Taxes)	37,366	21,624	9,532	6,210	06
Net Operating Income					
Pro Forma Net Operating Income	145,140	80,974	40,189	23,977	13
Income Taxes					
Pro Forma Income Taxes	17,205	9,599	4,764	2,842	13
Total Pro Forma Revenue Requirement	661,439	396,963	176,617	87,859	
Percents Code 12	100.00%	60.02%	26.70%	13.28%	
Less Other Revenue	(5,372)	(3,224)	(1,434)	(714)	12
Net Revenue Requirement	656,067	393,739	175,183	87,145	
Percents Code 12	100.00%	60.02%	26.70%	13.28%	

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Summary of Allocation Factors

Allocation Code	Description	% Volume	% Customer	% Direct Fire	Check Total %
01	Volume Cost	100.00	0.00	0.00	100.00
02	Customer Cost	0.00	100.00	0.00	100.00
03	Direct Fire Cost	0.00	0.00	100.00	100.00
04	Trans. And Dist. Mains	45.00	30.00	25.00	100.00
05	Trans. And Dist. Plant	38.21	37.42	24.37	100.00
06	Total Plant	57.87	25.51	16.62	100.00
07	Depreciation Expense	58.30	27.89	13.81	100.00
08	Trans. And Dist. O&M Expense	25.48	49.14	25.38	100.00
09	O&M Before A&G and Management Fee	64.56	26.59	8.85	100.00
10	O&M Before Management Fee	64.21	26.53	9.26	100.00
11	Management Fee	61.04	26.02	12.94	100.00
12	Revenue Requirement	60.02	26.70	13.28	100.00
13	Rate Base	55.79	27.69	16.52	100.00

Explanation of Factors Used in the Allocations

01 This Code allocates items 100 percent to Volume Cost

02 This Code allocates items 100 percent to Customer Cost.

03 This Code allocates items 100 percent to Direct Fire Cost.

04 This Code allocates items to the cost components based on analyses of transmission and distribution inch-feet.

05 This Code allocates items to the cost components based on the composite allocation of transmission and distribution plant.

06 This Code allocates items to the cost components based on the composite allocation of total utility plant

07 This Code allocates items to the cost components based on the composite allocation of depreciation expense.

08 This Code allocates items to the cost components based on the composite allocation of transmission and distribution operation and maintenance expense.

09 This Code is based on the composite allocation of O&M expense without A&G expense and the management fee.

10 This Code is based on the composite allocation of O&M expense without the management fee.

11 This Code is based on equal weightings of Codes 06 and 11. It is used to allocate the management fee.

12 This Code allocates items to the cost components based on the composite allocation of the revenue requirement.

13 This Code allocates items to the cost components based on the composite allocation of the rate base.

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Transmission and Distribution Inch-Feet
Inch-Feet of Mains in Service at December 31, 2007
Reduce Larger Mains to 2" Size

Actual Mains in Service			Reduce Larger Mains to 2" Size		
Size	Length	In-Ft	Size	Length	In-Ft
1 1/4'	0	0.0	1 1/4'	0	0.0
1 1/2"	0	0.0	1 1/2"	0	0.0
2"	5,345	10,690.0	2"	5,345	10,690.0
3"	0	0.0	2"	0	0.0
4"	1,185	4,740.0	2"	1,185	2,370.0
6"	30,701	184,206.0	2"	30,701	61,402.0
8"	29,622	236,976.0	2"	29,622	59,244.0
10"	1,717	17,170.0	2"	1,717	3,434.0
12"	2,594	31,128.0	2"	2,594	5,188.0
Total	71,164	484,910.0	Total	71,164	142,328.0

Inch-Feet Based on Actual Size of Mains	484,910.0
Inch-Feet Based on Reduced Size of Mains	142,328.0
Difference	342,582.0
	70.65%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Transmission and Distribution Inch-Feet
Inch-Feet of Mains in Service at December 31, 2007
Reduce Larger One Size

Actual Mains in Service			Reduced One Size		
Size	Length	In-Ft	Size	Length	In-Ft
1 1/4'	0	0.0	1 1/4'	0	0.0
1 1/2"	0	0.0	1 1/2"	0	0.0
2"	5,345	10,690.0	2"	5,345	10,690.0
3"	0	0.0	3"	0	0.0
4"	1,185	4,740.0	4"	1,185	4,740.0
6"	30,701	184,206.0	4"	30,701	122,804.0
8"	29,622	236,976.0	6"	29,622	177,732.0
10"	1,717	17,170.0	8"	1,717	13,736.0
12"	2,594	31,128.0	10"	2,594	25,940.0
Total	71,164	484,910.0	Total	71,164	355,642

Inch-Feet Based on Actual Size of Mains	484,910.0
Inch-Feet Based on Reduced Size of Mains	355,642.0
Difference	129,268.0
	26.66%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Direct Fire Costs to Private and Municipal Fire

Item	Total Direct Fire	Private Fire Protection	Municipal Fire Protection
Total Operating Expense - C	45,757	2,928	42,829
Total Depreciation and Amort - B	9,073	1,191	7,882
Total Other Taxes - A	6,210	796	5,414
Pro Forma Net Oper Income - A	23,977	3,074	20,903
Pro Forma Income Taxes - A	2,842	364	2,478
Total Pro Forma Revenue Req'm'nt	87,859	8,353	79,506
Percents	100.00%	9.51%	90.49%
Less Other Revenue	(714)	(68)	(646)
Net Revenue Requirement	87,145	8,285	78,860
Percents	100.00%	9.51%	90.49%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Development of Factors for Private/Municipal Fire Allocation

Item	Total Direct Fire	Private Fire Protection	Municipal Fire Protection
Plant in Service			
Hydrants	77,338	0	77,338
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs	0		
Trans. And Dist. Mains	521,531		
Total	521,531	76,769	444,762
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above Plant	598,869	76,769	522,100
Plant Percents - A	100.00%	12.82%	87.18%
Depreciation Expense			
Hydrants	1,029	0	1,029
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs	0		
Trans. And Dist. Mains	8,476		
Total	8,476	1,248	7,228
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above Depr. Exp.	9,505	1,248	8,257
Depr. Exp. Percents - B	100.00%	13.13%	86.87%
O&M Expense			
Hydrants	4,614	0	4,614
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs	0		
Trans. And Dist. Mains	3,556		
Total	3,556	523	3,033
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above O&M Exp.	8,170	523	7,647
O&M Exp. Percents - C	100.00%	6.40%	93.60%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Weighted Fire Protection Units

Private Fire Protection

Size	Number	Factor	Weighted Number	%
4"	1	0.44	0.44	
6"	9	1.00	9.00	
8"	1	1.78	1.78	
Total	11		11.22	14.72%

Municipal Fire Protection

Actual Number of Hydrants:				
Total	65	1.00	65.00	85.28%
Grand Total			76.22	100.00%

Notes: Weighting factors are based on the ratio of the cross-sectional area of a given size to the cross-sectional area of a 6" service. Hydrants are assumed to have a 6" branch.

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Allocation of Volume and Customer Costs to Fire Protection

COS Allocation Results

	$ Amount	%
Volume Costs	393,739	60 02%
Customer Costs	175,183	26.70%
Direct Fire Costs - Private	8,285	1.26%
Direct Fire Costs - Municipal	78,860	12.02%
Net Revenue Requirement	656,067	100.00%

The above results contain certain volume costs and certain customer costs which are properly allocable to private fire and to municipal fire.

Customer Costs:

Cust. Rec. & Coll. Exp.:	$ Amount	% of Bills
Remain in Customer	7,559	98.15%
Alloc to Private Fire	131	1.70%
Alloc to Municipal Fire	12	0.15%
Total Cust. Rec. & Coll. Exp.	7,702	100.00%

Cust. Installation Exp.:	$ Amount	% of Svcs
Remain in Customer	170	88.93%
Alloc to Private Fire	21	11.07%
Alloc to Municipal Fire	0	0.00%
Total Cust. Installation Exp.	191	100.00%

Maint. of Services:	$ Amount	% of Svcs
Remain in Customer	9,304	88.93%
Alloc to Private Fire	1,158	11.07%
Alloc to Municipal Fire	0	0.00%
Total Maint. of Services	10,462	100.00%

With above three allocations, the resulting fire allocation becomes:

$ Amount	%
88,467	13.48%

According to AWWA Water Rates Manual M1, Fourth Edition, Chapter 5, "Rate Design for Small Water Utilities", it is appropriate for aproximately 30% of the revenues of a 635 customer water utility to be obtained from fire protection. This recommendation can be used as a guideline to allocate some of the volume costs to fire protection. To be conservative, the target fire protection revenue can be set at 20% of total revenue or $ 131.213 this means that $ 42,746 of the volume costs would then be allocated tore.

Reallocate Volume Costs:	$ Amount	% of Units
Alloc to Private Fire	6,292	14.72%
Alloc to Municipal Fire	36,454	85.28%
Total Reallocated Volume Cost	42,746	100 00%

Reallocation Results

	$ Amount	%
Volume Costs	350,993	53.50%
Customer Costs	173,861	26.50%
Direct Fire Costs - Private	15,887	2.42%
Direct Fire Costs - Municipal	115,326	17.58%
Net Revenue Requirement	656,067	100.00%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Weighted Number of Services

GWS Meter Size	Number of Meters	Service Factor	Weighted Number	%
5/8"	596	1.0	596.0	
3/4"	1	1.3	1.3	
1"	14	2.0	28.0	
1 1/2"	11	2.7	29.7	
2"	12	4.0	48.0	
3"	1	4.0	4.0	
4"	0	5.3	0.0	
Total	635		707.0	88.93%

Private Fire Size	Number	Service Factor	Weighted Number	
4"	1	5.3	5.3	
6"	9	8.0	72.0	
8"	1	10.7	10.7	
Total	11		88.0	11.07%
Grand Total			795.0	100.00%

Notes: Weighting factors are based on the ratio of service diameters.

Percentage Distribution of Bills

Class	Number of Bills	%
GWS	7,620	98.15 %
Private Fire	132	1.70 %
Muni. Fire	12	0.15 %
Total	7,764	100.00 %

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Revenues Under Present Rates

General Water Service

Residential:

Meter Size	Number of Meters	Number of Bills	Present Rate	Present Revenue
5/8"	537	6,444	$ 10.27	$ 66,179.88
3/4"	1	12	14.61	175.32
1"	8	96	22.08	2,119.68
1 1/2"	6	72	39.81	2,866.32
2"	1	12	61.58	738.96
3"	0	0	114.41	0.00
4"	0	0	187.49	0.00
Total	553	6,636		$ 72,080.16
	CCFT			
Volume:	53,886		$ 3.30	$ 177,823.80

Commercial

Meter Size	Number of Meters	Number of Bills	Present Rate	Present Revenue
5/8"	54	648	$ 10.27	$ 6,654.96
3/4"	0	0	14.61	0.00
1"	6	72	22.08	1,589.76
1 1/2"	5	60	39.81	2,388.60
2"	6	72	61.58	4,433.76
3"	0	0	114.41	0.00
4"	0	0	187.49	0.00
Total	71	852		$ 15,067.08
	CCFT			
Volume:	10,371		$ 3.30	$ 34,224.30

Industrial

Meter Size	Number of Meters	Number of Bills	Present Rate	Present Revenue
5/8"	2	24	$ 10.27	$ 246.48
3/4"	0	0	14.61	0.00
1"	0	0	22.08	0.00
1 1/2"	0	0	39.81	0.00
2"	3	36	61.58	2,216.88
3"	0	0	114.41	0.00
4"	0	0	187.49	0.00
Total	5	60		$ 2,463.36
	CCFT			
Volume:	1,270		$ 3.30	$ 4,191.00

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Revenues Under Present Rates

General Water Service - Continued

Municipal

Meter Size	Number of Meters	Number of Bills	Present Rate	Present Revenue
5/8"	3	36	$ 10.27	$ 369.72
3/4"	0	0	14.61	0.00
1"	0	0	22.08	0.00
1 1/2"	0	0	39.81	0.00
2"	2	24	61.58	1,477.92
3"	1	12	114.41	1,372.92
4"	0	0	187.49	0.00
Total	6	72		$ 3,220.56
	CCFT			
Volume:	1,203		$ 3.30	$ 3,969.90
Grand Total GWS Revenue				$ 313,040.16

Fire Protection Service

Private Fire Protection

Size	Number	Number of Bills	Present Rate	Present Revenue
4"	1	12	$ 53.63	643.56
6"	9	108	153.91	16,622.28
8"	1	12	326.87	3,922.44
Total	11	132		$ 21,188.28

Municipal Fire Protection

Size	Number	of Bills	Rate	Revenue
Hydrant	65	780	$ 66.63	$ 51,971.40
Inch-Feet	493,754	1,975,016	0.03510	69,323.06
Grand Total Munipical Fire Revenue				$ 121,294.46

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Summary of Revenues Under Present Rates

Description		Amount	%
GWS Volume Revenue	$	220,209.00	48.34%
GWS Customer Charge Revenue	$	92,831.16	20.38%
Grand Total GWS Revenue	$	313,040.16	68.72%
Grand Total Private Fire Revenue	$	21,188.28	4.65%
Grand Total Munipical Fire Revenue	$	121,294.46	26.63%
Grand Total Revenue	$	455,522.90	100.00%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Rate Design

Municipal Fire Protection

Allocated Costs	$ 115,326
Present Revenue	$ 121,294.46

Present revenue is about 5.2% greater than the cost of service indications. Therefore, no increases will be developed for municipal fire protection.

Private Fire Protection

Allocated Costs	$ 15,887
Present Revenue	$ 21,188.28

Present revenue is about 33.4% greater than the cost of service indications. Therefore, no increases will be developed for private fire protection.

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Rate Design

GWS Customer Charges (Minimum Charges)

Allocated Costs	$	173,861
Present Revenue - Cust Chgs	$	92,831.16
Increase Required	$	81,029.84
		87.29 %

Rate Element	Present Monthly Rate	Developed Monthly Rate	% Increase
5/8"	$ 10.27	$ 19.24	87.34 %
3/4"	14.61	27.37	87.34 %
1"	22.06	41.33	87.35 %
1 1/2"	39.81	74.57	87.31 %
2"	61.58	115.34	87.30 %
3"	114.41	214.29	87.30 %
4"	187.49	351.16	87.30 %
6"	373.98	700.44	87.29 %
8"	622.01	1,164.97	87.29 %

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Rate Design

GWS Volumetric Rate

Pro Forma Net Revenue Requirement	$	656,066.60
Revenue from Developed Rates		
Municipal Fire Protection		121,294.46
Private Fire Protection		21,188.28
Customer Charges (Minimum Charges)		173,900.04
Remaining from Volumetric Rate	$	339,683.82
Annual Volume in 100 cu. ft.		66,730
Designed Rate per 100 cu. ft.	$	5.09

Rate Element		Present Rate		Developed Rate	% Increase	
Per 100 cu. ft.	$	3.30	$	5.09	54.24	%

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Revenues Under Developed Rates

General Water Service

Residential:

Meter Size	Number of Meters	Number of Bills	Developed Rate	Developed Revenue
5/8"	537	6,444	$ 19.24	$ 123,982.56
3/4"	1	12	27.37	328.44
1"	8	96	41.33	3,967.68
1 1/2"	6	72	74.57	5,369.04
2"	1	12	115.34	1,384.08
3"	0	0	214.29	0.00
4"	0	0	351.16	0.00
Total	553	6,636		$ 135,031.80
	CCFT			
Volume:	53,886		$ 5.09	$ 274,279.74

Commercial

Meter Size	Number of Meters	Number of Bills	Developed Rate	Developed Revenue
5/8"	54	648	$ 19.24	$ 12,467.52
3/4"	0	0	27.37	0.00
1"	6	72	41.33	2,975.76
1 1/2"	5	60	74.57	4,474.20
2"	6	72	115.34	8,304.48
3"	0	0	214.29	0.00
4"	0	0	351.16	0.00
Total	71	852		$ 28,221.96
	CCFT			
Volume:	10,371		$ 5.09	$ 52,788.39

Industrial

Meter Size	Number of Meters	Number of Bills	Developed Rate	Developed Revenue
5/8"	2	24	$ 19.24	$ 461.76
3/4"	0	0	27.37	0.00
1"	0	0	41.33	0.00
1 1/2"	0	0	74.57	0.00
2"	3	36	115.34	4,152.24
3"	0	0	214.29	0.00
4"	0	0	351.16	0.00
Total	5	60		$ 4,614.00
	CCFT			
Volume:	1,270		$ 5.09	$ 6,464.30

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Calculation of Revenues Under Developed Rates

General Water Service - Continued

Municipal

Meter Size	Number of Meters	Number of Bills	Developed Rate	Developed Revenue
5/8"	3	36	$ 19.24	$ 692.64
3/4"	0	0	27.37	0.00
1"	0	0	41.33	0.00
1 1/2"	0	0	74.57	0.00
2"	2	24	115.34	2,768.16
3"	1	12	214.29	2,571.48
4"	0	0	351.16	0.00
Total	6	72		$ 6,032.28
	CCFT			
Volume:	1,203		$ 5.09	$ 6,123.27
Grand Total GWS Revenue				$ 513,555.74

Fire Protection Service

Private Fire Protection

Size	Number	Number of Bills	Developed Rate	Developed Revenue
4"	1	12	$ 53.63	643.56
6"	9	108	153.91	16,622.28
8"	1	12	326.87	3,922.44
Total	11	132		$ 21,188.28

Municipal Fire Protection

Size	Number	of Bills	Developed Rate	Developed Revenue
Hydrant	65	780	$ 66.63	$ 51,971.40
Inch-Feet	493,754		0.14040	69,323.06
Grand Total Munipical Fire Revenue				$ 121,294.46

Pittsfield Aqueduct Company, Inc.
Pittsfield Division
Summary of Revenues Under Developed Rates

Description		Amount	%
GWS Volume Revenue	$	339,655.70	51.77%
GWS Customer Charge Revenue	$	173,900.04	26.51%
Grand Total GWS Revenue	$	513,555.74	78.28%
Grand Total Private Fire Revenue	$	21,188.28	3.23%
Grand Total Munipical Fire Revenue	$	121,294.46	18.49%
Grand Total Revenue under Developed Rates	$	656,038.48	100.00%
Net Revenue Requirement		656,067.00	
Difference	$	(28.52)	
		-0.004%	
		Negligible	

TAB 23

1604.01(a)(8) Most Recent Construction Budget

Pittsfield Aqueduct Company, Inc.
Capital and Construction Budget 2020

Provided pursuant to NHPUC Rule 1604.01(8)

		Project Description	Total 2020 incl O/H
Engineering		**Subtotal 2019 Carryover/Multi-year Projects**	-
	New 2020 Projects		
Engineering	Breach and ERP	Breach and ERP	7.00
		Total 2020 Capital Projects Budget including 2019 carryover	**7.00**

		Work Description	-
	2019 Carryover/Multi-year Projects		
T&D		**Subtotal 2019 Carryover/Multi-year Projects**	-
	New 2020 Projects		
T&D	New Services (1)	New Services (1)	5.00
T&D	Renewed Services (2)	Renewed Services (2)	11.00
T&D	Hydrants (2)	Hydrants (2)	12.00
T&D	Gates (2)	New Gates installation (2)	8.00
T&D	Radios (10)	Replace failed Radios (10)	1.00
T&D	Meters 5/8"-6" New(1) Replace Failed (6)	Meters 5/8"-6" New Meters - PAC (7)	0.70
			-
			-
		Subtotal New 2020 Projects	**37.70**
		Total 2020 Capital Projects Budget including 2019 carryover	**37.70**

		Work Description	Total 2020 incl O/H
	2019 Carryover/Multi-year Projects		
Water Supply		n/a	-
		Subtotal 2019 Carryover/Multi-year Projects	-
	New 2020 Projects		
Water Supply	Berry Pond DBP Treatment evaluation/design	Berry Pond DBP Treatment evaluation/design	20.00
Water Supply	Misc. structural improvements	Misc. structural improvements	10.00
Water Supply	PAC lab/Process equipment	PAC lab/Process equipment	10.00
Water Supply	Replace filter valve actuators, 3	Replace filter valve actuators, 3	4.00
Water Supply	Replace SCADA PLC	Equipment no longer supported by manufacturer	15.00
		Subtotal New 2020 Projects	**59.00**
		Total 2020 Capital Projects Budget including 2019 carryover	**59.00**

		Work Description	-
	0		-
IT			-
			-
			-
		Subtotal 2019 Carryover/Multi-year Projects	-
	PAC lab/Process equipment		
IT	Switch Replacement for Pittsfield	Change out end of life switch in Pitts.	**1.20**
			-
			-
			-
		New Gates installation (2)	**1.20**
		-	**1.20**

2019 Carryover/Multi-year Projects - Total PAC	**-**
New 2020 Projects - Total PAC	**104.90**
Total Capital Budget - PAC	**104.90**

TAB 24

1604.01(a)(9) Chart of Accounts if Different than NHPUC

The information does not exist.

TAB 25

1604.01(a)(10) Securities and Exchange Commission 10K and 10Q

This data does not exist. See Order No. 25,292.

TAB 26

1604.01(a)(11) Membership Fees, Dues and Lobbying Expenses

All memberships are through PWW.

TAB 27

1604.01(a)(12) Depreciation Study if not previously filed in an adjudicative proceeding

Depreciation Study was filed in DW 08-052 and is attached.

Pittsfield Aqueduct Company

Comparative Analysis
of
Depreciation Rates

Guastella Associates, Inc.
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GUASTELLA ASSOCIATES, INC.
UTILITY MANAGEMENT • VALUATION • RATE CONSULTANTS

6 BEACON STREET. SUITE 410
BOSTON, MA 02108
TEL: (617) 423-3030
FAX: (617) 423-2929

February 25, 2008

Ms. Bonnie Hartley
Vice President of Administration
Pennichuck Water Works, Inc.
25 Manchester Street
Merrimack, NH 03054

Dear Ms. Hartley:

I have completed an analysis of the comparative depreciation rates that would reflect the reasonably recovery of the loss in service value of the depreciable assets of Pittsfield Aqueduct Company.

The results of our analysis are set forth in this report, which includes specific schedules that provide recommended depreciation rates, comparative average service lives and the difference, by account, of the annual depreciation expense under present and recommended depreciation rates, as applied to plant balances as of December 31, 2007.

I very much appreciate this opportunity to provide consulting services, and am available to review this report with you or the PUC Staff.

Respectfully submitted,
GUASTELLA ASSOCIATES, INC.

John F. Guastella
President

Pittsfield Aqueduct Company

Table of Contents

Introduction

The purpose of this analysis is to establish average service lives, salvage values and resultant depreciation rates that are reasonably applicable to the depreciable property of the Pittsfield Aqueduct Company ("PAC" or "Company").

In accordance with discussions with the Company, as well as an informal discussion with the PUC Staff, a decision was made to perform a depreciation analysis on the basis of the use of comparative average service lives and depreciation rates. The primary reasons for this approach are the lack of sufficient retirement data because of the size of the Company and its historic development, and the high cost of performing actuarial studies that would likely produce incomplete or uncertain results for a small utility with limited retirement data. It has been our experience that for small water utilities, actuarial depreciation studies are rarely, if ever, performed. Instead, depreciation rates are typically established on the basis of comparative analyses. Consistent with that experience, the National Association of Regulatory Utility Commissioners has published guidelines of average service lives and depreciation rates for small water companies, recognizing the need for and acceptance of such comparisons.

Recommendation

The recommended depreciation rates are provided at the outset of this report in order to facilitate a review of subsequent references and supporting analyses. Schedule 1 contains, by primary plant account, the average service lives, net salvage values and annual depreciation rates that in our judgment would best recover the original cost of the Company's depreciable assets. As will be explained later, the recommended depreciation rates are consistent with those established by the New Hampshire Public Utilities Commission ("PUC") in The Pennichuck Water Works, Inc. ("PWW") last rate case, *with a few necessary exceptions.*

Source of Comparative Data

All of the source data relied upon with respect to average service lives have been obtained from this firm's files. The source data include determinations of average service lives for utilities with which this firm has been directly or indirectly involved, most based on actuarial studies. The utilities that were selected for this analysis are located in the northern part of the country, the Northeast and Midwestern states. It has been our experience that determinations of average service lives for water utilities in areas of the country where there are extreme seasonal weather changes tend to produce results that are more consistent with each other. It is noted that data for such states as Florida and California were specifically excluded because the average service lives were disproportionately shorter, likely due to different construction characteristics in the climate of those parts of the country.

The source data also includes average service lives published by the National Association of Regulatory Utility Commissioners ("NARUC"). These data are given significant weight because they were specifically developed to assist small water utilities in establishing reasonable depreciation rates. However, the most important source data are the average service lives recently established by the PUC for PWW. Those average service lives were based on actuarial studies and thoroughly examined by the PUC.

Although considered proprietary, Appendix A contains copies of this firm's original source data that include average service lives, as summarized in Schedule 2, for review by the Company and PUC Staff, with a request that they be treated as confidential property not to be distributed to any other party.

Analysis of Average Service Lives

Schedule 2 contains a compilation of the source data with respect to average service lives. It shows for each primary plant account the average service lives, the water utility and state in which it is located, along with the NARUC recommended average service lives, and PWW's average service lives. The average service lives for each utility and each NARUC publication were summarized to show the high, low and average of all examples, excluding PWW's. PWW's average service lives are considered the most relevant in this comparative analysis because they were based on comprehensive actuarial studies that were examined by the PUC, and because they relate to property that is in close proximity to PAC. Moreover, the maintenance, repair and asset management practices of PWW are the same for PAC, so that on a prospective basis several factors that affect the loss in value of assets will be similar. In addition, PWW and PAC operate in the same climate and are subject to the same regulatory requirements.

A review of Schedule 2 shows that of the 27 accounts for which PWW has average service lives, 7 are within 10% of the average of all other examples; and 9 are higher and 10 are lower than the average. Thus, PWW's average service lives lie in the middle of the data base. Accordingly, in my judgment using PWW's average service lives for those accounts that were considered and approved in the last rate case would be the most appropriate recommendation. The accounts that were not addressed in PWW's last rate case include: Account 306–Lake & River Intakes, Account 308–Infiltration Galleries, Account 309–Supply Mains and Account 348–Other Miscellaneous Equipment. On the basis of judgment, considering the average of the examples on Schedule 2, I recommend the approximate average of the average service lives of 50, 45 and 70 years for accounts 306, 308 and 309, respectively, and 10 years for account 348 which is the average service life now used by PAC.

Net Salvage Values

Having selected the average service lives, the next step was to assign salvage values to each account. Because most of the recommended average service lives were those of PWW, the logical choice is to also use salvage values of PWW. It is noted that water utilities in the state of Illinois and the Illinois Commerce Commission have made the most progress in estimating net salvage values. The negative net salvage values reflect the high cost of removal for many accounts, as shown in the source data for Illinois in Appendix A. This observation is made to confirm that PWW's approved net salvage values are conservative and appropriate to use for this analysis.

Impact of Recommended Depreciation Rates

The selected average service lives and net salvage values produce the recommended rates as shown on Schedule 1. Schedule 3 has been prepared to show the difference between the application of the recommended and existing depreciation rates to PAC's plant balances as of December 31, 2007. The existing depreciation rates produce a total annual depreciation expense in the amount of $157,275 compared with the recommended depreciation rates that produce $152,090. This $5,185 reduction is minor. Note that the recommended depreciation rates include rates for accounts for which PAC currently has no investment, which provides for potential additions to those accounts in the future.

Reserve for Depreciation

As PAC experiences more retirements it will be able to make judgments as to the ongoing reasonableness of the recommended average service lives and depreciation rates. On a prospective basis, the recommended reduction in the annual depreciation will slightly reduce the annual accruals to the reserve for deprecation by only about 3%. Because of the lack of depreciation curves specific to PAC, any effort to determine a theoretical reserve would only produce an estimated result based on estimated depreciation curves, and would be a disproportionately costly and unnecessary effort. Accordingly, there is no need to make any other direct adjustment to the reserve for depreciation.

Conclusion

Although this comparative analysis is not as sophisticated or statistically accurate as an actuarial study, the data does provide information with which to make a valid judgment and produces reasonable depreciation rates. It certainly confirms that the use of PWW's depreciation rates for most accounts is not only reasonable but enables a consistent accounting between the two affiliated companies.

On the basis of the findings and analysis outlined in this report, it is recommended that the Company seek approval to implement the depreciation rates reflected in Schedule 1.

Respectfully submitted,
GUASTELLA ASSOCIATES, INC.

John F. Guastella
President

Pittsfield Aqueduct Company **Schedule 1**

Recommended Depreciation Rates

A/C No.	Description	Average Service Lives	Net Salvage Value	Annual Depreciation Rates
	Source of Supply & Pumping:			
304.1	Structures & Improvements	48	-10.0%	2.30%
305.0	Coll. & Impdg. Reservoirs	67	-20.0%	1.79%
306.0	Lake & River Intakes	50	-10.0%	2.20%
307.0	Wells & Springs	30		3.33%
308.0	Infiltration Galleries	45		2.22%
309.0	Supply Mains	70	-10.0%	1.57%
304.2	Structures & Improvements	45	-10.0%	2.44%
310.0	Power Generation Equipment	22		4.55%
311.2	Electric Pumping Equipment	25	-10.0%	4.40%
311.3	Diesel Pumping Equipment	70	-10.0%	1.57%
311.6	Other Pumping Equipment	30		3.33%
	Water Treatment Equipment:			
304.3	Structures & Improvements	51	-10.0%	2.14%
320.0	Purification System Equipment	15		6.67%
320.2	Water Treatment Equipment	36	-20.0%	3.31%
	Transmission & Distribution Plant:			
304.5	Structures & Improvements	35	-10.0%	3.14%
330.0	Distr. Reserv. & Standpipes	50	-10.0%	2.18%
331.1	Mains - 6" & Larger	70	-10.0%	1.57%
331.2	Mains - 4" & Under	40	-10.0%	2.75%
339.0	Other Plant & Misc. Equipment	40		2.50%
333.1	Services	45	-10.0%	2.44%
334.1	Meters & Installations	23	-10.0%	4.78%
335.0	Hydrants	49	-10.0%	2.24%
	General Plant:			
304.4	Structures & Improvements	35	-10.0%	3.14%
340.0	Office Furn. & Equipment	12	3.0%	8.08%
341.0	Transportaton Equipment	9	15.0%	9.44%
342.0	Stores Equipment	25		4.00%
343.0	Tools, Shop & Garage Equipment	15		6.67%
344.0	Laboratory Equipment	20		5.00%
345.0	Power Operated Equipment	15	10.0%	6.00%
346.0	Communications Equipment	19		5.26%
347.0	Computer Equipment	7		14.29%
348.0	Other Miscellaneous Equipment	10		10.00%

Pittsfield Aqueduct Company

Schedule 2

Comparative Average Service Lives

A/C No.	Description	N.J.	Del.	Illinois				NARUC								New York			All Examples			Pennichuck Water Works
						Illinois American		1972		1977		1979		1981			Util. & Ind.	Long				
		E'town	Artesian	Kankakee	Candlewick	Company	ICC Staff	low	high	low	high	low	high	low	high	Citizen's	Merrick	Island	Low	High	Average	
	Source of Supply & Pumping:																					
304.1	Structures & Improvements	65		30	30	30	30	25	50	35	40	35	40	35	40				25	65	37	**48**
305.0	Coll. & Impdg. Reservoirs	60				50	50	35	75	50	75	50	75	50	75				35	75	59	**67**
306.0	Lake & River Intakes	50		75	75	60	75	35	60	35	45	35	45	35	45				35	75	52	
307.0	Wells & Springs	45	45	60	60	35	60	25	50	25	35	25	35	25	35	45	35	50	25	60	41	**30**
308.0	*Infiltration Galleries*	*80*								25	50	25	50	25	50				25	80	44	
309.0	Supply Mains	85	85			75	90			50	75	50	75	50	75				50	90	71	
304.2	Structures & Improvements	45	65	55	55	50	55			35	40	35	40	35	40	50	40	50	35	65	46	**45**
310.0	Power Generation Equipment	25		30	30	25	30										30	40	25	40	30	**22**
311.2	Electric Pumping Equipment	35	35	40	40	35	40			20	20	20	20	20	20	35	20	40	20	40	29	**25**
311.3	Diesel Pumping Equipment	35				22	30			25	25	25	25	25	25	35	30	40	22	40	29	**70**
311.6	Other Pumping Equipment	35				20	20			25	25	25	25	25	25	30	30		20	35	26	**30**
	Water Treatment Equipment:																					
304.3	Structures & Improvements	35	55	45	45	40	45			35	40	35	40	35	40	50	40	50	35	55	42	**51**
320.0	Purification System Equipment				35	35	35			20	35	20	35	20	35	15	15	25	15	35	27	**15**
320.2	Water Treatment Equipment	35	45	35	35	35	35	15	30	20	35	20	35	20	35	15	25	25	15	45	29	**36**
	Transmission & Distribution Plant:																					
304.5	Structures & Improvements	50			30					35	40	35	40	35	40				30	50	38	**35**
330.0	Distr. Reserv. & Standpipes	75	80	60	60	50	60	25	60	30	60	30	60	30	60	55	55	75	25	80	54	**50**
331.1	Mains - 6" & Larger	95	85	90	90	90	90	75		50	75	50	75	50	75	100	100	100	50	100	81	**70**
331.2	Mains - 4" & Under															65			65	65	65	**40**
339.0	Other Plant & Misc. Equipment																					**40**
333.1	Services	45	35	60	60	60	60	35	50	30	50	30	50	30	50	50	45	65	30	65	47	**45**
334.1	Meters & Installations	25	25	14	14	30	30	35	50	35	45	35	45	35	45	35	50	40	14	50	35	**23**
335.0	Hydrants	65	60	43	43	40	43	40	50	40	60	40	60	40	60	65	70	65	40	70	52	**49**
	General Plant:																					
304.4	Structures & Improvements	25	25	25	25	25	25			35	40	35	40	35	40	50	50	60	25	60	36	**35**
340.0	Office Furn. & Equipment	15	30	19	19	20	19	15		20	25	20	25	20	25	25	30	30	15	30	22	**12**
341.0	Transportaton Equipment	7	10	6	6	5	5	7		7		7	7	7	7	10		3	3	10	7	**9**
342.0	Stores Equipment	20	30	29	29	20	29	15		20		20	20	20	20	25		45	15	45	24	
343.0	Tools, Shop & Garage Equipment	15	30	13	13	12	13	15		15	20	15	20	15	20	25	25	25	12	30	18	**15**
344.0	Laboratory Equipment	30	9	20	20	15	20	15		15	20	15	20	15	20		20	30	9	30	19	**20**
345.0	Power Operated Equipment	10	15	10	10	10	10	12		10	15	10	15	10	15		8	7	7	15	11	**15**
346.0	Communications Equipment	15	15	8	8	8	8	10		10		10	10	10	10	5	15	10	5	15	10	**19**
347.0	Computer Equipment		8			5	5												5	8	6	**7**
348.0	Other Miscellaneous Equipment	25	20			15	15	15								20	25	25	15	25	20	**10**

Pittsfield Aqueduct Company **Schedule 3**

Comparison of Depreciation Expense
Under Present and Recommended Depreciation Rates

		UPIS	Annual Depreciation				
		Balances	Present		Recommended		
A/C No.	Description	at 12/31/07	Rate	Amount	Rate	Amount	Difference
	Source of Supply & Pumping:						
304.1	Structures & Improvements	$981,131	1.33%	$13,049	2.30%	$22,531	$9,482
305.0	Coll. & Impdg. Reservoirs	48,493	1.47%	713	1.79%	869	156
306.0	Lake & River Intakes	29,050	2.00%	581	2.20%	639	58
307.0	Wells & Springs	91,568	2.00%	1,831	3.33%		
308.0	Infiltration Galleries				2.22%		
309.0	Supply Mains	70,046	1.32%	925	1.57%	1,101	176
304.2	Structures & Improvements				2.44%		
310.0	Power Generation Equipment	32,516	6.12%	1,990	4.55%		
311.2	Electric Pumping Equipment	274,332	6.12%	16,789	4.40%	12,071	-4,719
311.3	Diesel Pumping Equipment				1.57%		
311.6	Other Pumping Equipment				3.33%		
	Water Treatment Equipment:						
304.3	Structures & Improvements	934,998	2.42%	22,627	2.14%	19,982	-2,644
320.0	Purification System Equipment	15,186	6.67%	1,013	6.67%		
320.2	Water Treatment Equipment	242,682	3.11%	7,547	3.31%	8,038	491
	Transmission & Distribution Plant:						
304.5	Structures & Improvements				3.14%		
330.0	Distr. Reserv. & Standpipes	521,032	2.44%	12,713	2.18%		
331.1	Mains - 6" & Larger	1,555,102	1.81%	28,147	1.57%	24,437	-3,710
331.2	Mains - 4" & Under	1,060,287	1.46%	15,480	2.75%	29,158	13,678
339.0	Other Plant & Misc. Equipment	8,857	5.63%	499	2.50%	221	-277
333.1	Services	260,923	2.33%	6,080	2.44%	6,378	299
334.1	Meters & Installations	305,585	5.00%	15,279	4.78%	14,615	-664
335.0	Hydrants	77,337	1.35%	1,044	2.24%	1,736	692
	General Plant:						
304.4	Structures & Improvements				3.14%		
340.0	Office Furn. & Equipment	2,689	5.00%	134	8.08%		
341.0	Transportaton Equipment				9.44%		
342.0	Stores Equipment				4.00%		
343.0	Tools, Shop & Garage Equipment	40,310	8.25%	3,326	6.67%	2,687	-638
344.0	Laboratory Equipment	3,939	5.00%	197	5.00%	197	
345.0	Power Operated Equipment				6.00%		
346.0	Communications Equipment	44,990	5.00%	2,250	5.26%	2,368	118
347.0	Computer Equipment	26,292	14.29%	3,756	14.29%	3,756	0
348.0	Other Miscellaneous Equipment	13,055	10.00%	1,306	10.00%	1,306	0
	Total Depreciable Property	$6,640,400		$157,275		$152,090	-$5,185
301.0	Organization	298,621					
303.0	Land and Land Rights	183,965					
	Total Utility Plant in Service	$7,122,986		$157,275		$152,090	-$5,185

Note: Accounts 309.0, 331.1 and 331.2 reflect a reallocation as shown in Appendix B.

Appendix A

ELIZABETHTOWN WATER COMPANY

SUMMARY OF DEPRECIATION STUDY AND ANNUAL DEPRECIATION USING AVERAGE SERVICE LIFE FOR UTILITY PLANT IN SERVICE AS OF DECEMBER 31,1993

			per Depreciation Study				
Acc. No.	Depreciable Plant Accounts	Balance Surviving	Selected Curve	Avg Serv Life	Net Salv	Deprec. Rate	Annual Deprec.
303	Misc. Intangible Plant	179,194		65	0%	1.54%	$2,760
311	Supply Struct & Improv	$481,899	R2.5	65	0%	1.54%	7,414
312	Coll & Impound Reservoirs	1,420,005	R0.5	60	0%	1.67%	23,667
313	Lake, River & Other Intakes	300,511	S6.0	50	0%	2.00%	6,010
314	Wells & Springs	2,181,104	L0.0	45	0%	2.22%	48,469
315	Infilt Galleries & Tunnels	118,698	S1.0	80	0%	1.25%	1,484
316	Supply Mains	1,187,545	R2.5	85	0%	1.18%	13,971
321	Pumping Struct & Improv	9,667,421	L4.0	45	−10%	2.44%	236,315
323	Other Production Equip	3,601,644	S6.0	25	0%	4.00%	144,066
325	Electric Pump Equip	22,625,052	R2.0	35	0%	2.86%	646,430
326	Diesel Pump Equip	4,249,348	R1.0	35	0%	2.86%	121,410
328	Other Pump Equip	166,462	R2.5	35	0%	2.86%	4,756
331	WT Struct & Improv	13,077,679	R2.0	35	−10%	3.14%	411,013
332	Water Treatment Equip	30,644,636	S1.0	35	−10%	3.14%	963,117
341	T&D Struct & Improv	3,400,533	S4.0	50	−10%	2.20%	74,812
342	Dist Res & Standpipes	13,424,844	R2.0	75	−10%	1.47%	196,898
343	Trans & Dist Mains	229,652,972	L0.0	95	−5%	1.11%	2,538,270
344	Fire Mains	119,253	L0.0	95	−5%	1.11%	1,318
345	Services	40,482,996	R4.0	45	−50%	3.33%	1,349,433
346	Meters	13,599,679	L0.0	25	7%	3.72%	505,908
347	Meter Installation	1,747,317	L0.0	25	0%	4.00%	69,893
348	Hydrants	13,275,726	S1.0	65	5%	1.46%	194,030
390	Struct & Improv	1,365,728	S0.0	25	−10%	4.40%	60,092
391	Office Furniture & Equip	4,084,189	L0.0	15	0%	6.67%	272,279
392	Transportation Equip	3,217,740	L2.0	7	10%	12.86%	413,709
393	Stores Equip	49,161	S6.0	20	0%	5.00%	2,458
394	Tools, Shop, & Garage Eq	736,508	L0.0	15	0%	6.67%	49,101
395	Laboratory Equip	888,816	S2.0	30	0%	3.33%	29,627
396	Power Operated Eq	842,768	L0.0	10	10%	9.00%	75,849
397	Communication Eq	1,584,033	L0.0	15	0%	6.67%	105,602
398	Misc. Equipment	224,672	R0.5	25	0%	4.00%	8,987
399	Other Tangible Eq	134,981	R0.5	25	0%	4.00%	5,399
	TOTAL	$418,733,114				2.05%	$8,584,546
	Total Non−Depreciable	5,234,785					0
	TOTAL	$423,967,899				2.02%	$8,584,546

ARTESIAN WATER COMPANY, INC.

SUMMARY OF DEPRECIATION STUDY AND ANNUAL DEPRECIATION USING AVERAGE SERVICE LIFE FOR UTILITY PLANT IN SERVICE AS OF JUNE 30, 1997

Acc. No.	Depreciable Plant Accounts	Ending Balance Surviving at 06/30/97	per Depreciation Study Selected Curve	Avg Serv Life	Net Salv	Deprec. Rate	Annual Deprec.
314	Wells & Springs	2,986,836	R2.5	45	0%	2.10%	62,741
314.1	Monitoring Wells	101,180	R2.5	45	0%	2.10%	2,125
316	Supply Mains	451,838	SC	85	0%	1.11%	5,025
321	Pumping Struct & Improv	1,598,354	R1.0	65	-5%	1.53%	24,406
325	Electric Pump Equip	2,639,531	L0.0	35	0%	2.70%	71,288
331	*WT Struct & Improv*	4,039,979	R3.0	55	-10%	1.89%	76,377
332	Water Treatment Equip	1,094,823	R2.5	45	0%	2.10%	22,998
342	Dist Res & Standpipes	7,524,034	S1.0	80	-5%	1.24%	93,348
343	Trans & Dist Mains	62,203,900	L2.0	85	-5%	1.17%	726,346
345	Services	10,358,829	S3.0	35	-10%	2.97%	307,745
345.1	Temporary Services	893	S3.0				
346	Meters	6,202,529	L2.0	25	4%	3.63%	225,142
348	Hydrants	3,566,385	S5.0	60	0%	1.58%	56,187
390	Struct & Improv	200,646	R3.0	25	-10%	4.16%	8,345
390.1	*Leasehold*	2,024,933	R3.0	25	-10%	4.16%	84,221
391	Office Furniture	471,581	L0.0	30	0%	3.15%	14,859
391.1	Office Equipment	314,853	R1.5	20	0%	4.73%	14,881
391.2	Computer Equipment	664,265	SC	8	0%	11.82%	78,489
391.4	Computer Software	507,801	SC	5	0%	18.91%	96,002
391.5	Computer Mainframe	77,508	remaining	3.25	0%	10.28%	7,966
392	Transportation Equip	1,643,391	L0.5	10	10%	8.51%	139,810
393	Stores Equip	20,128	SC	30	0%	3.15%	634
394	Tools, Shop, & Garage Eq	211,392	SC	30	0%	3.15%	6,661
394.1	Tools, Shop - Leasehold	108,809	SC	30	0%	3.15%	3,428
395	Laboratory Equip	41,763	L0.0	9	0%	10.50%	4,386
396	Power Operated Eq	711,162	SC	15	10%	5.67%	40,334
397	Communication Eq	601,086	L1.5	15	0%	6.30%	37,879
398	Misc. & Other Equip	307,415	L0.5	20	0%	4.73%	14,529
	TOTAL	$110,675,844				2.01%	$2,226,152

CONSUMERS ILLINOIS WATER COMPANY
Kankakee Water District
Rate Case Docket No. 95-0000

Annual Depreciation & Accrual Rates by Account
For the Twelve Months Ending December 31, 1994 and Pro Forma

Schedule B-3.2
Page 1 of 1
Witness Responsible:
J.F.Guastella

Data: (12) Months Actual and (0) Months Estimated
Type of Filing: (X)Original ( )Updated ( )Revised
Related Working Papers :

Line No.	Account Number (A)	Account Description (B)	Jurisdictional Plant Investment (C)	Accrual Rate (D)	Calculated Depreciation Expense (E)	Calculated Percentage Net Salvage (F)	Average Service Life (G)	Average Curve Form (H)
1		Source of Supply Plant						
2	30420	Structures and Improvements	3,617	4.17%	$151	-25.00%	30	N/A
3	30420	Lake, River and Other Intakes	94,717	1.47%	1,392	-10.00%	75	
4	30420	Wells and Springs	8,974	1.67%	150	0.00%	60	
5		Pumping Plant						
6	30430	Structures and Improvements	515,995	2.27%	11,713	-25.00%	55	
7	31030	Power Generating Equipment	249,567	3.30%	8,236	0.00%	30	
8	31130	Electric Pump Equipment	405,175	3.13%	12,682	-25.00%	40	
9		Water Treatment Plant						
10	30440	Structures and Improvements	1,453,435	2.73%	39,679	-25.00%	45	
11	32040	Water Treatment Equipment	2,537,934	3.57%	90,604	-25.00%	35	
12		Transmission & Distribution Plant						
13	30450	Structures and Improvements	9,879	4.17%	412	-25.00%		
14	33050	Distribution Reservoirs and Standpipes	791,970	1.67%	13,226	0.00%	60	
15	33150	Mains	14,289,958	1.89%	270,080	-70.00%	90	
16	33350	Services	5,468,532	3.33%	182,102	-100.00%	60	
17	33450	Meters	1,390,773	6.21%	86,367	14.00%	14	
18	33450	Meter Installations	1,160,631	4.44%	51,532	-100.00%	45	
19	33550	Hydrants	1,475,226	3.95%	58,271	-70.00%	43	
20		General Plant						
21	30460	Structures and Improvements	453,010	4.00%	18,120	0.00%	25	
22	34060	Office Furniture and Equipment	188,394	4.74%	8,930	10.00%	19	
23	34160	Transportation Equipment	479,393	10.77%	51,631	30.00%	6	
24	34260	Stores Equipment	5,772	3.28%	189	5.00%	29	
25	34360	Tools, Shop and Garage Equipment	484,998	7.31%	35,453	5.00%	13	
26	34460	Laboratory Equipment	86,844	5.00%	4,342	0.00%	20	
27	34560	Power Operated Equipment	115,219	5.00%	5,761	50.00%	10	
28	34560	Communication Equipment	194,605	12.50%	24,326	0.00%	8	
29								
30		Subtotal	$31,864,618	3.06%	$975,349			
31		CIAC	7,275,225	1.89%	137,502			
32		Pro Forma Jurisdictional						
33		Depreciation Expense	$24,589,393		$837,847			

CONSUMERS ILLINOIS WATER COMPANY
Candlewick Lake District
Rate Case Docket No. 98-

Depreciation Study - Summary of Recommendations

Line No.	Account Number (A)	Account Description (B)	Average Service Life Comparative Range (C)	Average Service Life Recommended (D)	Depreciation Rates Comparative Range (E)	Depreciation Rates Recommended (F)
1		Source of Supply Plant				
2	30420	Structures and Improvements	25-75	30	1.33-2.92%	4.17%
3	30420	Lake, River and Other Intakes	16-75	75	1.33-6.35%	1.47%
4	30420	Wells and Springs	22-45	60	2.44-4.50%	1.67%
5						
6		Pumping Plant				
7	30430	Structures and Improvements	28-60	55	1.87-3.55%	2.27%
8	31030	Power Generating Equipment	16-40	30	2.43-6.32%	3.30%
9	31130	Electric Pump Equipment	17-42	40	2.33-5.87%	3.13%
10						
11		Water Treatment Plant				
12	30440	Structures and Improvements	34-66	45	1.51-2.94%	2.73%
13	32040	Water Treatment Equipment	26-62	35	1.62-5.12%	3.57%
14						
15		Transmission & Distribution Plant				
16	30450	Structures and Improvements	25-75	30	1.33-2.92%	4.17%
17	33050	Distribution Reservoirs and Standpipes	44-75	60	1.54-2.92%	1.67%
18	33150	Mains	49-106	90	0.96-2.33%	1.89%
19	33350	Services	34-45	60	2.20-3.33%	3.33%
20	33450	Meters (1)	23-61	14	1.62-4.33%	6.21%
21	33450	Meter Installations	23-61	45	1.62-4.33%	4.44%
22	33550	Hydrants	27-75	43	1.37-3.70%	3.95%
23						
24		General Plant				
25	30460	Structures and Improvements	26-55	25	1.83-3.78%	4.00%
26	34060	Office Furniture and Equipment	5-23	19	4.32-18.71%	4.74%
27	34160	Transportation Equipment	6-8	6	12.50-16.98%	10.77%
28	34260	Stores Equipment	15-46	29	2.16-7.01%	3.28%
29	34360	Tools, Shop and Garage Equipment	14-32	13	3.17-6.08%	7.31%
30	34460	Laboratory Equipment	10-25	20	4.00-9.44%	5.00%
31	34560	Power Operated Equipment	7-25	10	4.00-10.37%	5.00%
32	34660	Communication Equipment	5-17	8	5.88-19.89%	12.50%

(1) Recommended figures reflect an average of different types within the account.

Candlewick Water Division
Rate Case Docket No. 99-

Pro Forma Depreciation Expense Calculation

Line No.	Account Number	Account Description	Ave. Future Test Year Depreciable Plant	Recommended Depreciation Rate	Recommended Depreciation Expense	Percentage Net Salvage	Average Service Life
		Intangible Plant					
1	30115	Organization	$0	-	$0	-	-
2	*30215*	*Franchises & Consents*	0	-	0	-	-
3							
4		Source of Supply Plant					
5	30325	Land and Land Rights	0	-	0	-	-
6	30425	Structures and Improvements	25,819	4.17%	1,077	-25.00%	30
7	30725	Wells and Springs	321,887	1.67%	5,376	0.00%	60
8	30925	Supply Mains	21,783	1.89%	412	-70.00%	90
9							
10		Pumping Plant					
11	30435	Structures and Improvements	1,335	2.78%	37	-25.00%	45
12	31030	Power Generation Equipment	90,000	3.33%	2,997	0.00%	30
13	31135	Electric Pump Equipment	130,662	3.13%	4,090	-25.00%	40
14							
15		Water Treatment Plant					
16	*30445*	*Structures and Improvements*	588,000	2.78%	16,346	-25.00%	45
17	32045	Water Treatment Equipment	355,106	3.57%	12,677	-25.00%	35
18							
19		Transmission & Distribution Plant					
20	33055	Distribution Reservoirs and Standpipes	193,767	1.67%	3,236	0.00%	60
21	33155	Mains	423,347	1.89%	8,001	-70.00%	90
22	33355	Services	808,892	3.33%	26,936	-100.00%	60
23	*33455*	*Meters*	122,074	6.14%	7,495	14.00%	14
24	33455	Meter Installations	55,571	4.44%	2,467	-100.00%	45
25	33555	Hydrants	44,713	3.95%	1,766	-70.00%	43
26							
27		General Plant					
28	30365	Land and Land Rights	0	-	0	-	-
29	30465	Structures and Improvements	0	5.00%	0	-25.00%	25
30	34065	Office Furniture and Equipment	34,538	4.74%	1,637	10.00%	19
31	34165	Transportation Equipment	72,834	11.67%	8,500	30.00%	6
32	34365	Tools, Shop and Garage Equipment	56,087	7.31%	4,100	5.00%	13
33	34465	Laboratory Equipment	5,876	5.00%	294	0.00%	20
34	34665	Communication Equipment	38,092	12.50%	4,762	0.00%	8
35	34765	Miscellaneous Equipment	1,074	6.67%	72	0.00%	15
36							
37		Subtotal	3,391,457	3.31%	112,278		
38		CIAC	(421,264)	1.89%	(7,962)	-70.00%	90
39		Other	9,099	1.89%	172	-70.00%	90
40							
41		Total	$2,979,292	3.51%	$104,488		

ILLINOIS-AMERICAN WATER COMPANY
AVERAGE SERVICE LIFE AND NET SALVAGE

Docket No. 92-0116
ICC Ex. 8.02 (Revised)

ACCOUNT NUMBER	ACCOUNT TITLE	COMPANY AVERAGE SERVICE LIFE	COMPANY NET SALVAGE PERCENT (%)	STAFF AVERAGE SERVICE LIFE	STAFF NET SALVAGE PERCENT (%)	CALCULATED STAFF DEPRECIATION RATE %
SOURCE OF SUPPLY PLANT						
311.00	SS Structures & Improvements	30	-25%	30	-25%	4.17
312.00	Collecting and Impounding Reservoirs	50	0%	50	0%	2.0
313.00	Lake, River & Other Intakes	60	-25%	75	-10%	1.47
314.00	Wells & Springs	35	0%	60	0%	1.67
316.00	Supply Mains	75	-10%	90	-10%	1.22
317.00	Other Water Source Plant	0	0%	0	0%	
PUMPING EQUIPMENT						
321.00	Pumping Structures & Improvements	50	-25%	55	-25%	2.27
323.20	Other Power Production Equipment	25	-5%	30	0%	3.30
325.00	Electric Pumping Equipment	35	-25%	40	-25%	3.13
326.00	Diesel Pumping Equipment	22	0%	30	0%	3.33
328.00	Other Pumping Equipment	0	0%	20	0%	5.0
WATER TREATMENT PLANT						
331.00	WT Structures & Improvements	40	-25%	45	-25%	2.78
332.00	Water Treatment Equipment	35	-50%	35	-25%	3.57
TRANSMISSION & DISTRIBUTION PLANT						
342.00	Dist. Reservoirs & Standpipes	50	0%	60	0%	1.67
343.00	Trans. & Dist. Mains	90	-70%	90	-70%	1.89
345.00	Services	60	-200%	60	-100%	3.33
346.00	Meters - Metal	30	20%	30	20%	2.67
346.00	Meters - Plastic	10	0%	10	0%	10.0
347.00	Meter Installations	40	-200%	45	-100%	4.44
348.00	Hydrants	40	-100%	43	-70%	3.95

PAGE 1 OF 2

ILLINOIS-AMERICAN WATER COMPANY
AVERAGE SERVICE LIFE AND NET SALVAGE

Docket No. 92-0116
ICC Ex. 8.02 (Revised)

ACCOUNT NUMBER	ACCOUNT TITLE	COMPANY AVERAGE SERVICE LIFE	COMPANY NET SALVAGE PERCENT (%)	STAFF AVERAGE SERVICE LIFE	STAFF NET SALVAGE PERCENT (%)	CALCULATED STAFF DEPRECIATION RATE
GENERAL PLANT						
390.10	Office Structures	25	0%	25	0%	4.0 %
390.20	Stores, Shop & Garage Structures	25	-10%	25	0%	4.0
390.30	Misc. Structures & Improvements	25	-10%	25	0%	4.0
391.10	Office Furniture & Equipment	20	10%	19	10%	4.74
391.21	Data Handling Equipment	5	10%	5	10%	18.0
391.22	Other Office Equipment	10	10%	10	-10%	11.0
391.23	Computer Programs	5	0%	5	0%	20.0
392.11	Transportation Equipment - Heavy Truck	5	40%	5	40%	12.0
392.12	Transportation Equipment - Light Truck	7	30%	6.5	30%	10.77
392.20	Transportation Equipment - Cars	4	35%	3.5	35%	18.57
392.30	Transportation Equipment - Other	10	0%	10	0%	10.0
393.00	Stores Equipment	20	5%	29	5%	3.28
394.00	Tools, Shop & Garage Equipment	12	5%	13	5%	7.31
395.00	Laboratory Equipment	15	0%	20	0%	5.0
396.00	Power Operated Equipment	10	50%	10	50%	5.0
397.00	Communication Equipment	8	0%	8	0%	12.5
398.00	Miscellaneous Equipment	15	0%	15	0%	6.67
INTANGIBLE PLANT						
301.00	Organization	0	0%	0	0%	
302.00	Franchise & Consents	0	0%	0	0%	
	Land and Land Rights	0	0%	0	0%	

CONSUMERS ILLINOIS WATER COMPANY

ICC Staff Exhibit 5.0
Docket No. 95-0342

Schedule 5.01

ACCOUNT NUMBER	ACCOUNT TITLE	PLANT BALANCE ($)	NET SALVAGE (%)	NET SALVAGE AMOUNT ($)	UNRECOVERED COST ($)	AVERAGE LIFE (Yrs.)	ANNUAL EXPENSE AMOUNT ($)	ANNUAL EXPENSE PERCENT (%)
	SOURCE OF SUPPLY							
304.00	Structures & Improvements	$3,617	-25%	($904)	$4,521	30.0	$151	4.17%
305.00	Collect & Impund Res.	$0	0%	$0	$0	0.0	$0	0.00%
306.00	Lakes, Rivers & Other Intakes	$94,717	-10%	($9,472)	$104,189	75.0	$1,389	1.47%
307.00	Wells & Springs	$8,974	0%	$0	$8,974	60.0	$150	1.67%
308.00	Infiltr Galleries & Tunnels	$0	0%	$0	$0	0.00	$0	0.00%
309.00	Supply Mains	$0	0%	$0	$0	0.00	$0	0.00%
	Subtotal	$107,308		($10,376)	$117,684		$1,689	1.57%
	PUMPING EQUIPMENT							
	Structures & Improvements	$515,995	-25%	($128,999)	$644,994	55.0	$11,727	2.27%
310.00	Power Generating Equip.	$249,567	0%	$0	$249,567	30.0	$8,319	3.33%
311.00	Pumping Equipment	$405,175	-25%	($101,294)	$506,469	40.0	$12,662	3.13%
	Subtotal	$1,170,737		($230,293)	$1,401,030		$32,708	2.79%
	WATER TREATMENT PLANT							
	Structures & Improvements	$1,453,435	-25%	($363,359)	$1,816,794	45.0	$40,373	2.78%
320.00	Water Treatment Equipment	$2,537,934	-25%	($634,484)	$3,172,418	35.0	$90,641	3.57%
	Subtotal	$3,991,369		($997,842)	$4,989,211		$131,014	3.28%
	TRANSMISSION & DISTRIBUTION PLANT							
	Structures & Improvements	$9,879	-25%	($2,470)	$12,349	30.0	$412	4.17%
330.00	Dist. Res. & Standpipe	$791,970	0%	$0	$791,970	60.0	$13,200	1.67%
331.00	Mains	$14,289,958	-70%	($10,002,971)	$24,292,929	90.0	$269,921	1.89%
333.00	Service	$5,468,532	-100%	($5,468,532)	$10,937,064	60.0	$182,284	3.33%
334.00	Meters	$1,390,773	14%	$194,708	$1,196,065	14.0	$85,433	6.14%
334.00	Meter Installation	$1,160,631	-100%	($1,160,631)	$2,321,262	45.0	$51,584	4.44%
335.00	Hydrants	$1,475,226	-70%	($1,032,658)	$2,507,884	43.0	$58,323	3.95%
	Subtotal	$24,586,969		($17,472,553)	$42,059,522		$661,157	2.69%
	GENERAL PLANT							
	Structures & Improvements	$453,010	0%	$0	$453,010	25.0	$18,120	4.00%
341.00	Office Furniture	$188,394	10%	$18,839	$169,555	19.0	$8,924	4.74%
342.00	Transportation Equipment	$479,393	30%	$143,818	$335,575	6.0	$55,929	11.67%
343.00	Stores Equipment	$5,772	5%	$289	$5,483	29.0	$189	3.28%
344.00	Tools, Shop & Garage Equip.	$484,998	5%	$24,250	$460,748	13.0	$35,442	7.31%
345.00	Laboratory Equip.	$86,844	0%	$0	$86,844	20.0	$4,342	5.00%
346.00	Power Operated Equip.	$115,219	50%	$57,610	$57,610	10.0	$5,761	5.00%
347.00	Communication Equip.	$194,605	0%	$0	$194,605	8.0	$24,326	12.50%
	Misc. Equip.	$0	0%	$0		0.0	$0	0.00%
	GENERAL PLANT SUBTOTAL	$2,008,235		$244,805	$1,763,430		$153,034	7.64%
	SUBTOTAL UTILITY PLANT	$31,864,618		($18,466,259)	$50,330,877		$979,601	3.07%
	INTANGIBLE PLANT							
301.00	Organization	$496,931			$496,931			
302.00	Franchise & Consents	$147,180			$147,180			
303.00	Land and Land Rights	$194,009			$194,009			
	TOTAL	$838,120			$838,120			
	TOTAL UTILITY PLANT	$32,702,738		($18,466,259)	$51,168,997		$979,601	3.00%

Small Water Utilities

Class of Plant	Suggested Average Service Life (1)		
Source of Water Plant			
Structures and Improvements			
Wood Frame		30	
Steel		40	
Cement Block		40	
Reinforced Concrete or Brick		50	
Miscellaneous		25	
Collecting and Impounding Reservoirs			
Wood Structures		35	
Earth Fill Structures		60	
Concrete Structures		75	
Lake, River and Other Intakes			
Wood Structures		35	
Concrete Structures		60	
Springs and Tunnels		30-50	
Wells		25-50	
Mains	Over 6"	4"-6"	Under 4"
Cast Iron	75	60	
Asbestos Cement	60	60	
Steel, Cement Lined	50	50	
Concrete	50	50	
Other	45	40	25
Other Source of Supply Plant	25		
Pumping Equipment		20-30	
Other Pumping Plant		10-25	
Water Treatment Equipment			
Chlorinators		15-30	
Other		25-35	
Reservoirs and Tanks			
Earth		50	
Concrete		60	
Steel		50	
Redwood		40	
Miscellaneous		25	
Services			
Galvanized		35	
Copper		50	
Meters		35-50	
Meter Installations		35	
Hydrants			
Wharf		40	
Standard		50	
Office Furniture and Equipment		15	
Transportation Equipment		7	
Stores Equipment		15	
Laboratory Equipment		15	
Communication Equipment		10	
Power Operating Equipment		12	
Tools, Shop and Garage Equipment		15	
Other General Plant		15	

(1) These lives are intended only as a guide. Longer or shorter lives would be used where conditions warrant.

APPENDIX C
Page 1 of 2

NARUC 1977

TYPICAL AVERAGE SERVICE LIVES,
SALVAGE RATES, AND DEPRECIATION RATES

SMALL WATER UTILITIES

Acct. No.	Class of Plant	Average Service Life[a] Years	Net Salvage Percent	Depreciation Rate Percent
	Source of Supply Plant			
311	Structures and Improvements	35-40		2.9-2.5
312	Collecting & Impounding Reservoirs	50-75		2.0-1.3
313	Lake, River and Other Intakes	35-45		2.9-2.2
314	Wells and Springs	25-35		4.0-2.9
315	Galleries and Tunnels	25-50		4.0-2.0
316	Supply Mains	50-75		2.0-1.3
317	Other Source of Water Supply Plant	30-40		3.3-2.5
	Pumping Plant			
321	Structures and Improvements	35-40		2.9-2.5
324-7	Pumping Equipment	20		5.0
328	Other Pumping Plant	25		4.0
	Water Treatment Plant			
331	Structures and Improvements	35-40		2.9-2.5
332	Water Treatment Equipment	20-35		5.0-2.9
	Transmission and Distribution Plant			
341	Structures and Improvements	35-40		2.9-2.5
342	Reservoirs and Tanks	30-60		3.3-1.7
343	Transmission and Distribution Mains	50-75		2.0-1.3
344	Fire Mains	50-75		2.0-1.3
345	Services	30-50		3.3-2.0
346	Meters	35-45	10	2.5-2.0

a/ These lives are intended as a guide; longer or shorter lives should be used where conditions warrant.

NARUC 1979

FIGURE 1

Typical Average Service Lives, Salvage Rates, and Depreciation Rates

Small Water Utilities

NARUC Account Number	Class of Plant	Average Service Life a/ Years	Net Salvage Percent	Depreciation Rate Percent
	Source of Supply Plant			
311	Structures and Improvements	35-40		2.9-2.5
312	Collecting & Impounding Reservoirs	50-75		2.0-1.3
313	Lake, River and Other Intakes	35-45		2.9-2.2
314	Wells and Springs	25-35		4.0-2.9
315	Galleries and Tunnels	25-50		4.0-2.0
316	Supply Mains	50-75		2.0-1.3
317	Other Source of Water Supply Plant	30-40		3.3-2.5
	Pumping Plant			
321	Structures and Improvements	35-40		2.9-2.5
324-7	Pumping Equipment	20		5.0
328	Other Pumping Plant	25		4.0
	Water Treatment Plant			
331	Structures and Improvements	35-40		2.9-2.5
332	Water Treatment Equipment	20-35		5.0-2.9
	Transmission and Distribution Plant			
341	Structures and Improvements	35-40		2.9-2.5
342	Reservoirs and Tanks	30-60		3.3-1.7
343	Transmission and Distribution Mains	50-75		2.0-1.3
344	Fire Mains	50-75		2.0-1.3
345	Services	30-50		3.3-2.0
346	Meters	35-45	10	2.6-2.0
347	Meter Installations	40-50		2.5-2.0
348	Hydrants	40-60	5	2.4-1.6
	General Plant			
390	Structures & Improvements	35-40		2.9-2.5
391	Office Furniture and Equipment	20-25	5	4.8-3.8
392	Transportation Equipment	7	10	12.9
393	Stores Equipment	20		5.0
394	Tools, Shop & Garage Equipment	15-20	5	6.3-4.8
395	Laboratory Equipment	15-20		6.7-5.0
396	Power Operated Equipment	10-15	10	9.0-6.0
397	Communication Equipment	10	10	9.0

a/ These lives are intended as a guide; longer or shorter lives should be used where conditions warrant.

RAK 2.00
Page 1

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Typical Average Service Lives, Salvage Rates, and Depreciation Rates

Small Water Utilities

NARUC Account Number	Class of Plant	Average Service Life Years	Net Salvage Percent	Depreciation Rate Percent
	Source of Supply Plant			
311	Structures and Improvements	35-40		2.9-2.5
312	Collecting & Impounding Reservoirs	50-75		2.0-1.3
313	Lake, River and Other Intakes	35-45		2.9-2.2
314	Wells and Springs	25-35		4.0-2.9
315	Galleries and Tunnels	25-50		4.0-2.0
316	Supply Mains	50-75		2.0-1.3
317	Other Source of Water Supply Plant	30-40		3.3-2.5
	Pumping Plant			
321	Structures and Improvements	35-40		2.9-2.5
324-7	Pumping Equipment	20		5.0
328	Other Pumping Plant	25		4.0
	Water Treatment Plant			
331	Structures and Improvements	35-40		2.9-2.5
332	Water Treatment Equipment	20-35		5.0-2.9
	Transmission and Distribution Plant			
341	Structures and Improvements	35-40		2.9-2.5
342	Reservoirs and Tanks	30-60		3.3-1.7
343	Transmission and Distribution Mains	50-75		2.0-1.3
344	Fire Mains	50-75		2.0-1.3
345	Services	30-50		3.3-2.0
346	Meters	35-45	10	2.6-2.0
347	Meter Installations	40-50		2.5-2.0
348	Hydrants	40-60	5	2.4-1.6
	General Plant			
390	Structures & Improvements	35-40		2.9-2.5
391	Office Furniture and Equipment	20-25	5	4.8-3.8
392	Transportation Equipment	7	10	12.9
393	Stores Equipment	20		5.0
394	Tools, Shop & Garage Equipment	15-20	5	6.3-4.8
395	Laboratory Equipment	15-20		6.7-5.0
396	Power Operated Equipment	10-15	10	9.0-6.0
397	Communication Equipment	10	10	9.0

3

[illegible]

CITIZENS WATER 64

	Acct.		(1) Original Cost 12/31/[illegible]	(2) Unrecorded Retirements	(1) Adjusted Original Cost	Average Svc. Life
1	301	Organization	516	–	516	
2	311.1	Source of supply land	21015	–	21015	
3	311.2	Pumping land	40411	–	40411	
4	311.3	Water treatment land	1642	–	1632	
5	311.4	Trans. and distribution land	14359	–	14359	
6	311.5	Dist. reservoirs and standpipes land	3453	–	3453	
7	311.8	Shop garage and stores land	37532	–	37532	
8		Nondepreciable Plant				
9	313.1	Springs and wells	184524	37056	147468 (2)	45
10	313.2	Pumping structures	46614	–	46614	50
11	313.3	Purification buildings	1377	–	1377	50
12	313.5	Dist. reservoirs and standpipes	163075	–	163075	35
13	313.7	Office buildings	13664	–	13664	50
14	313.8	Shop garage and stores building	9454	–	9454	50
15	313.9	Miscellaneous structures	193	–	193	50
16	316	Electric pumping equipment	270449	–	270449	35
17	317	Diesel pumping equipment	19039	–	19039	35
18	319.2	Gasoline engine pumping equip.	10689	–	10689	30
19	320	Purification system	7164	–	7164	15
20	321	Mains	1485136	–	1485136	65 / 100
21	323	Services	291150	–	291150	50
22	324	Meters	44891	–	44891	35
23	324.1	Hydrants	150425	–	150425	15
24	324.2	Fire mains	330	–	330	65
25	328	Office furniture and equipment (1)	19957	–	19957	35
26	329.1	Transportation equip. – Vehicles	29353	–	29353	10
27	329.2	Garage and repair equipment	181	–	181	10
28	331	Shop equipment	1444	–	1444	25
29	333	Tools and work equipment	10836	–	10836	25
30	334	Communication equipment	5674	–	5674	15
31	335	Miscellaneous equipment	607	–	607	20
32		Depreciable Plant	2759891	37056	[illegible]	
33						
34		Total Plant	2884529	37056	[illegible]	

37 (1) Separate into 2 categories – Off F + F
Mach + Eq

39 (2) Develop (2) where 3rd degree Curve for Calc. experience
40 Retirement experience on Springs & wells

PSC Company

Row	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	[illegible] Net Salvage	Annual Rate - %	Average Life	Net Salvage	Annual Rate - %	[illegible] Rates	[illegible] Rates	Increase (Decrease)
9					[illegible]	[illegible]	4,377	811
10	–	2.3	50.0	–	[illegible]	10,026	1,975	–
11	–	2.0	50.0	–	2.0	89	88	–
12	–	2.0	50.0	–	2.2	3,089	[illegible]	–
13	–	1.8	54.9	–	1.8	355	[illegible]	–
14	–	2.0	50.0	–	2.0	190	237	47
15	–	2.0	50.0	–	2.3	4	[illegible]	–
16	–	2.0	50.0	–	2.0	1,097	1,097	–
17	–	2.9	35.0	–	2.9	351	411	60
18	–	2.8	39.0	–	[illegible]	310	310	–
19	–	2.0	50.0	–	[illegible]	263	365	102
20	4.3	3.7	19.7	–	5.1	[illegible]	[illegible]	–
21	–	1.0	100.0	–	1.5	10,035	10,527	492
22	–	2.0	47.1	–	.11	535	446	(89)
23	3.1	2.4	~~5?.0~~ 21	– 8 Yr	1.0	[illegible]	[illegible]	–
24	–	1.5	64.3	–	1.5	[illegible]	[illegible]	–
25	–	1.5	65.3	–	[illegible]	756	1,175	419
26	3.1	3.8	17.0	–	5.9	1,644	5,578	3,934
27	1.0	9.0	9.3	1.0	9.0	–	–	–
28	1.0	9.0	10.0	1.0	9.0	55	144	89
29	3	3.6	10.0	–	10.0	414	490	76
30	3	3.8	22.0	–	4.3	851	426	(425)
31	2.3	15.0	10.0	2.5	7.3	10	10	–
32	3	4.0	20.0	5	4.3	49,441	54,055	4,614

TABLE I

UTILITIES & INDUSTRIES CORP.
Merrick District

STRAIGHT-LINE, AVERAGE-LIFE DEPRECIATION RESERVE REQUIREMENTS AND ANNUAL DEPRECIATION ACCRUALS AS AT DECEMBER 31, 1972

	Book Cost As At December 31, 1972	Average Service Life	Type Curve	Net Salvage %	Depreciable Book Cost	Reserve Requirement	Annual Depreciation Accruals %	Annual Depreciation Accruals Amount
Intangible Plant								
Franchises and Consents	$ 2,043	-	-	100	$ 0	$ 0	-	$ 0
Source of Supply Plant								
Land and Land Rights	75,001	-	-	100	0	0	-	0
Wells and Springs	741,537	35	R3.0	0	741,537	173,347	2.86	21,[illegible]
Pumping Plant								
Structures and Improvements	414,725	40	L3.0	0	414,725	93,796	2.50	10,[illegible]
Other Power Production Equipment	15,108	30	h4.0	0	15,108	1,725	3.33	[illegible]
Electric Pumping Equipment	503,887	20	1st Degree	10	457,998	97,956	[illegible]	22,[illegible]
Diesel Pumping Equipment	72,381	30	R1.0	0	72,381	11,494	3.33	2,[illegible]
Other Pumping Equipment	35,252	30	R1.0	0	35,252	6,133	3.33	1,[illegible]
Water Treatment Plant								
Structures and Improvements	34,007	40	L3.0	0	34,007	14,253	2.50	850
Water Treatment Equipment:								
[illegible] Tanks	24,232	25	h4.0	0	24,232	3,360	4.00	[illegible]
[illegible]	74,500	15	1st Degree	5	70,775	23,449	6.33	4,[illegible]
Transmission and Distribution Plant								
Land and Land Rights	100,161	-	-	100	0	0	-	[illegible]
Distribution Reservoirs and Standpipes	223,383	55	h4.0	0	223,383	72,825	1.82	4,[illegible]
Transmission and Distribution Mains	8,361,787	100	3rd Degree	0	8,361,787	1,117,911	1.00	83,[illegible]
Services	2,039,629	45	3rd Degree	0	2,039,629	524,670	2.22	[illegible]
Meters	981,486	50	h4.0	10	883,337	276,095	1.80	17,[illegible]
Hydrants	963,085	70	2nd Degree	0	963,085	178,303	1.43	13,[illegible]
General Plant								
Land and Land Rights	52,896	-	-	100	0	0	-	0
Structures and Improvements	201,697	50	h3.0	0	201,697	31,848	2.00	4,[illegible]
Office Furniture and Equipment	138,508	30	R0.5	5	131,583	17,833	3.17	4,[illegible]
Transportation Equipment	16,605	*	-	25	12,454	9,562	[illegible]	3,[illegible]
Tools, Shop and Garage Equipment	53,673	25	h4.0	10	48,306	16,658	3.60	1,[illegible]
Laboratory Equipment	6,398	20	h3.0	0	6,398	3,081	5.00	[illegible]
Power Operated Equipment	34,520	8	h3.0	20	27,616	16,125	10.00	3,[illegible]
Communication Equipment	16,195	15	h3.0	5	15,385	4,731	6.33	1,[illegible]
Miscellaneous Equipment	8,543	25	h4.0	10	7,689	3,022	3.60	[illegible]
Totals	$15,196,839				$14,792,964	$2,608,443		$[illegible]

TABLE I

LONG ISLAND WATER CORPORATION

COMPARISON OF NET SALVAGE VALUES

Account		Net Salvage Percent Historical(1)	Net Salvage Percent Current(2)
314	Springs & Wells		
	Common-Suction (Shallow)	(15.56)	0.0
	Layne & Lauman (Deep)	(35.99)	0.0
321	Power & Pumping Structures	(10.46)	0.0
323	Other Power Production Equipment	(2.79)	0.0
325	Electric	(22.01)	5.0
326	Diesel Pumping Equipment	1.77	5.0
331	Water Treatment Structures	(75.22)	0.0
332	Water Treatment Equipment:		
	Filters & Yard Piping	(17.19)	0.0
	Chemical Feeders	(7.24)	25.0
342	Distribution Reservoirs & Standpipes:		
	Ground Storage	(30.42)	0.0
	Elevated Tanks	(83.06)	0.0
343	Transmission & Distribution Mains	(5.71)	0.0
345	Services	(286.00)	0.0
346	Meters	43.22	0.0
348	Hydrants	(74.62)	0.0
349	Fire Services	(25.68)	0.0
390	General Structures:		
	Office	(53.32)	0.0
	Garage	(50.52)	0.0
391	Office Furniture & Equipment:		
	Office Furniture & Equipment	(0.53)	5.0
	Office Machines	5.40	5.0
392	Transportation Equipment	36.14	30.0
393	Stores Equipment	-(3)	5.0
394	Tools, Shop & Garage Equipment:		
	Shop & Garage	0.67	5.0
	Tools & Work	4.17	20.0
395	Laboratory Equipment	0.00	5.0
396	Power-Operated Equipment:		
	Compressors	10.63	20.0
	Diggers (Backhoes)	36.21	20.0
397	Communication Equipment	6.85	10.0
398	Miscellaneous Equipment	0.00	5.0

Notes:
(1) Based on retirement history 1975 through 1984.
(2) Included in current annual depreciation rates.
(3) No retirements 1975 - 1984.
( ) Denotes negative percent net salvage.

TABLE II

LONG ISLAND WATER CORPORATION

COMPARISON OF AVERAGE SERVICE LIVES IN YEARS

Account		Current	Recommended
314	Springs & Wells:		
	Common-Suction (Shallow)	30	25
	Layne & Lauman (Deep)	50	50
321	Power & Pumping Structures:		
	Main Station	50	LS 2010(1)
	Others	50	50
323	Power Production Equipment	25	40
325	Electric Pumping Equipment	35	40
326	Diesel Pumping Equipment	35	40
331	Water Treatment Structures	50	LS 2010(1)
332	Water Treatment Equipment:		
	Filters & Yard Piping	60	75
	Chemical Feeders	20	25
0.2	Transmission & Distribution Rights of Way	100	100
342	Distribution Reservoirs & Standpipes:		
	Storage Basins	75	LS 2010(1)
	Ground Storage Tanks	75	75
	Elevated Tank	55	LS 2000(1)
343	Transmission & Distribution Mains	95.8(2)	100
345	Services	50	65
346	Meters	40	40
348	Hydrants	70	65
349	Fire Services	50	65
390	General Structures:		
	Office	60	LS 2020(1)
	Garage	35	LS 2010(1)
391	Office Furniture & Equipment:		
	Office Furniture & Equipment	25	30
	Office Machines	20	20
392	Transportation Equipment	3	3(3)
393	Stores' Equipment	25	45
394	Tools, Shop & Garage Equipment:		
	Shop & Garage	25	25
	Tools & Work	20	25
395	Laboratory Equipment	25	30
396	Power-Operated Equipment:		
	Compressors	15	7(3)
	Diggers (Backhoes)	9	7(3)
397	Communication Equipment	10	10(3)
398	Miscellaneous Equipment	15	25

Notes:
(1) Life Span. Service life equals age plus remaining life.
(2) Composite
(3) Programmed replacement period.

Appendix B

Pittsfield Aqueduct Company **Appendix B**

Allocation of Cost of Supply Mains, Mains 6" and Larger and Less Than 6"
As of December 31, 2007

	Diameter (Inches)	Footage	Inch-Feet	Cost per Inch-Foot (a)	Estimated Cost	Allocated Book Cost
	1					
	1.25	1,798	2,248	$3.50	$7,866	$6,440
	1.50	3,837	5,756	3.50	20,144	16,492
	2	85,201	170,402	3.50	596,407	488,267
	3	4,220	12,660	3.50	44,310	36,276
	4	44,742	178,968	3.50	626,388	512,812
Supply Mains	6	3,565	21,390	4.00	85,560	70,046
	6	31,349	188,094	4.00	752,376	615,956
	8	29,811	238,488	4.00	953,952	780,983
	10	1,717	17,170	4.00	68,680	56,227
	12	2,594	31,128	4.00	124,512	101,936
	Total	208,834	866,303		$ 3,280,196	$ 2,685,436

Total Under 6"	$1,060,287
Total 6" and Larger	$1,555,102
Supply Mains	$70,046

Note (a): Represents a relative cost per foot for the purpose of allocating original costs, not for a market value determination.

TAB 28

1604.01(a)(13) Management and Financial Audits if not previously filed in an adjudicative proceeding.

Such Audits are conducted annually at the parent level and every three years at the subsidiary level if loans exist. Please see the most recent audit citing PAC's NHDES loan.

Pennichuck Water Works, Inc.

Management and Financial Audits

Provided pursuant to NHPUC Rule 1604.01(13)

Pennichuck Corporation and Subsidiaries

Independent Auditors' Reports Pursuant
to Governmental Auditing Standards
and Uniform Guidance

For the Year Ended December 31, 2017

TABLE OF CONTENTS

MELANSON HEATH
ACCOUNTANTS • AUDITORS

121 River Front Drive
Manchester, NH 03102
(603)669-6130
melansonheath.com

Additional Offices:
Nashua, NH
Andover, MA
Greenfield, MA
Ellsworth, ME

OPINION ON THE FINANCIAL STATEMENT OF A FEDERAL PROGRAM WHEN USING THE PROGRAM-SPECIFIC AUDIT OPTION TO SATISFY THE UNIFORM GUIDANCE AUDIT REQUIREMENTS

Independent Auditors' Report

Board of Directors and Stockholder
Pennichuck Corporation and Subsidiaries

Report on Schedule of Expenditures of Federal Awards

We have audited the accompanying schedule of expenditures of federal awards for the Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) of Pennichuck Corporation and Subsidiaries for the year ended December 31, 2017.

Management's Responsibility

Management is responsible for the preparation and fair presentation of the financial statement of the program in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of a financial statement that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the financial statement of the program based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statement. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statement in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statement.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the schedule of expenditures of federal awards referred to above presents fairly, in all material respects, the expenditures of federal awards under the Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) in accordance with accounting principles generally accepted in the United States of America.

Melanson Heath

September 27, 2018

MELANSON HEATH
ACCOUNTANTS • AUDITORS

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Ellsworth, ME

REPORT ON COMPLIANCE FOR A FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE WHEN USING THE PROGRAM-SPECIFIC AUDIT OPTION TO SATISFY THE UNIFORM GUIDANCE AUDIT REQUIREMENTS

Independent Auditors' Report

Board of Directors and Stockholder
Pennichuck Corporation and Subsidiaries

Report on Compliance for Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468)

We have audited the compliance of Pennichuck Corporation and Subsidiaries with the types of compliance requirements described in the *U.S. Office of Management and Budget (OMB) Compliance Supplement* that could have a direct and material effect on its Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) for the year ended December 31, 2017.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468).

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for Pennichuck Corporation and Subsidiaries' Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) based on our audit of the types of compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) occurred. An audit includes examining, on a test basis, evidence about Pennichuck Corporation and Subsidiaries' compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for Pennichuck Corporation and Subsidiaries' Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468). However, our audit does not provide a legal determination of Pennichuck Corporation and Subsidiaries' compliance.

Opinion

In our opinion, Pennichuck Corporation and Subsidiaries complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on its Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) for the year ended December 31, 2017.

Report on Internal Control over Compliance

Management of Pennichuck Corporation and Subsidiaries is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered Pennichuck Corporation and Subsidiaries' internal control over compliance with the types of requirements that could have a direct and material effect on its Capitalization for Drinking Water State Revolving Loan Funds – Loan Program (Federal CFDA Number 66.468) to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of Pennichuck Corporation and Subsidiaries' internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Melanson Heath

September 27, 2018

PENNICHUCK CORPORATION AND SUBSIDIARIES

Schedule of Expenditures of Federal Awards

For the Year Ended December 31, 2017

Federal Agency Cluster Federal Office Pass through Agency Program Title	Pass through Identifying Number	Federal CFDA Number	Federal Expenditures
U.S. Environmental Protection Agency			
Capitalization Grants for Drinking Water State Revolving Funds			
Environmental Protection Agency			
Passed Through State of New Hampshire Department of Environmental Services:			
Capitalization Grants for Drinking Water State Revolving Funds - Loan *	1371010	66.468	$ 338,936
Capitalization Grants for Drinking Water State Revolving Funds - Loan *	612020	66.468	231,059
Capitalization Grants for Drinking Water State Revolving Funds - Loan **	1621010	66.468	1,792,351
Capitalization Grants for Drinking Water State Revolving Funds - Loan ***	1911010	66.468	113,046
Total Capitalization Grants for Drinking Water State Revolving Funds			2,475,392
Total U.S. Environmental Protection Agency			2,475,392
Total Federal Expenditures			$ 2,475,392

* Pennichuck East Utility, Inc.
** Pennichuck Water Works, Inc.
*** Pittsfield Aqueduct Company, Inc.

The accompanying notes are an integral part of this schedule.

PENNICHUCK CORPORATION AND SUBSIDIARIES

Notes to the Schedule of Expenditures of Federal Awards

For the Year Ended December 31, 2017

Note 1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") includes the federal award activity of Pennichuck Corporation and Subsidiaries under programs of the federal government for the year ended December 31, 2017. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of Pennichuck Corporation and Subsidiaries, it is not intended to and does not present the financial position, changes in net position or cash flows of Pennichuck Corporation and Subsidiaries.

Note 2. Summary of Significant Accounting Policies

- Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited to reimbursement.

- Pennichuck Corporation and Subsidiaries has elected not to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

Note 3. Subrecipients

Of the federal expenditures presented in the Schedule, Pennichuck Corporation and Subsidiaries did not provide federal awards to subrecipients.

Note 4. Loans

Expenditures reported in the Schedule represent loan proceeds received and expended in the current year. The Federal government has not imposed continuing compliance requirements on these loans; therefore, no ending balances at December 31, 2017 are reported in these notes.

Pennichuck Corporation and Subsidiaries

Schedule of Findings and Questioned Costs

For the Year Ended December 31, 2017

SECTION I - SUMMARY OF AUDITORS' RESULTS

Financial Statement (Schedule of Federal Awards)

Type of auditors' report issued:	Unmodified
Internal control over financial reporting:	
• Material weakness(es) identified?	__ yes ✓ no
• Significant deficiency(ies) identified?	__ yes ✓ none reported
Noncompliance material to financial statement noted?	__ yes ✓ no

Federal Awards

Internal control over major programs:	
• Material weakness(es) identified?	__ yes ✓ no
• Significant deficiency(ies) identified?	__ yes ✓ none reported
Type of auditors' report issued on compliance for major programs:	
Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program	Unmodified
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	__ yes ✓ no

Identification of major programs:

CFDA Number(s)	Name of Federal Program or Cluster
66.468	Capitalization Grants for Drinking Water State Revolving Loan Funds – Loan Program

Dollar threshold used to distinguish between type A and type B programs:	$750,000
Auditee qualified as low-risk auditee?	__ yes ✓ no

SECTION II - FINANCIAL STATEMENT FINDINGS

None.

SECTION III - FEDERAL AWARDS FINDINGS AND QUESTIONED COSTS

None.

SECTION IV - SCHEDULE OF PRIOR YEAR FINDINGS

There were no findings in the prior year.

TAB 29

1604.01(a)(14) Officer and Director Compensation for each of the last 2 years, detailing base compensation, bonuses, and incentive plans.

This data does not exist. As noted in PAC's 2019 Annual Report, any officer/director compensation is allocated through the Management Fee Allocation agreements. See also Tab 33.

TAB 30

1604.01(a)(15) Officer and Executive Incentive Plans

This data does not exist for PAC.

TAB 31

1604.01(a)(16) List of Amount of Voting Stock: owned by an officer or director individually; owned by a spouse or mnior child or an officer or directro; controlled by the officer or director directly or indirectly.

This data does not exist. See Order No. 25,292 and Order No. 25,695.

TAB 32

1604.01(a)(17) For utilities with less than $10,000,000 in annual gross revenues, a list of all Payments for Contractual Services in Excess of $10,000. For utilities $10,000,001 to $100,000,000 a list of payments in excess of $50,000.

Pittsfield Aqueduct Company, Inc.
Contractual Services over $10,000
For the Twelve Months Ended December 31, 2019

Provided pursuant to NHPUC Rule 1604.01(17)

Name	Address		Amount	Purpose
R.H. WHITE CONSTRUCTION CO	PO BOX 404	41 Central Street Ma, 1501	$12,653.40	CONSTRUCTION SERVICES
		Total	$12,653.40	

TAB 33

1604.01(a)(18) Amount of Assets and Costs Allocated to Non-Utility Operations and justification for such allocations

Pennichuck Water Works
Operating Expense Allocation (to other Subsidiary Companies)
For Month Ending 12/31/2019

Full Year Amounts (to be allocated)	YTD EXPENSES	Tier Allocation Required	Special Allocation	Tier 1 (All)	Tier 2 (Regulated + PWSC)	Tier 3 (PWW+PEU+ PWSC)	Tier 4 (Regulated)	PWSC Only	PAC Only	C Sheing Wages & Fringes Only (budgeted specifically on PAC P/L)
				Dollars Applicable to:						
Wages										
Officers Salaries & Wages	499,167	1		499,167	-	-	-	-	-	-
Salaries - Engineering	1,207,889	4		-	-	-	1,207,889	-	-	-
Office Salaries and Wages - IS	487,394	1		487,394	-	-	-	-	-	-
Office Salaries and Wages - Acctg	724,045	1		724,045	-	-	-	-	-	-
Office Salaries and Wages - Admin	184,571	1		184,571	-	-	-	-	-	-
Office Salaries and Wages - C/S	1,094,979	2		-	1,094,979	-	-	-	-	-
Office Salaries and Wages - BR	145,560	6		-	-	-	-	145,560	-	-
Less: Capitalized Overhead - IS	(1,942)	1		(1,942)	-	-	-	-	-	-
Less: Capitalized Overhead Engineering	(353,484)	4		-	-	-	(353,484)	-	-	-
Benefits (Based on 12/31/18 Schedule)										
Officers Salaries & Wages	243,244	1		243,244	-	-	-	-	-	-
Salaries - Engineering	588,604	4		-	-	-	588,604	-	-	-
Office Salaries and Wages - IS	237,507	1		237,507	-	-	-	-	-	-
Office Salaries and Wages - Acctg	352,827	1		352,827	-	-	-	-	-	-
Office Salaries and Wages - Admin	89,941	1		89,941	-	-	-	-	-	-
Office Salaries and Wages - C/S	533,583	2		-	533,583	-	-	-	-	-
Office Salaries and Wages - BR	70,931	6	-	-	-	-	-	70,931	-	-
Less: Capitalized Overhead IS	(946)	1		(946)	-	-	-	-	-	-
Less: Capitalized Overhead Engineering	(172,253)	4		-	-	-	(172,253)	-	-	-

Full Year Budgeted Amounts (to be allocated) - Tier 1		Tier Allocation Required	Special Allocation	Tier 1 (All)	Tier 2 (Regulated + PWSC)	Tier 3 (PWW+PEU+ PWSC)	Tier 4 (Regulated)	PWSC Only	PAC Only	C Sheing Wages & Fringes Only (budgeted specifically on PAC P/L)
				Dollars Applicable to:						
Facilities - Manchester Street										
Office Supplies & Expense	34,990	1		34,990	-	-	-	-	-	-
Office Equipment Rental	46,804	1		46,804	-	-	-	-	-	-
Rental Exp HECOP III	338,567	1		338,567	-	-	-	-	-	-
Manchester St Phone	29,302	1		29,302	-	-	-	-	-	-
Manchester St Electric	44,960	1		44,960	-	-	-	-	-	-
Maintenance Manchester St	33,117	1		33,117	-	-	-	-	-	-
Office Equipment maintenance	-	1		-	-	-	-	-	-	-
Miscellaneous Charges										
Senior Management Vehicles	3,822	1		3,822	-	-	-		-	-
Senior Management Fuel Purchased	4,504	1		4,504	-	-	-		-	-
Senior Management Vehicle Registrations	476	1		476	-	-	-		-	-
Courier & Express Mail Expense	253	1		253	-	-	-	-	-	-
Outside Svcs (Supervision/Spec Svcs)	269,938	1		269,938	-	-	-	-	-	-
Meetings and Conventions	46,091	1		46,091	-	-	-	-	-	-
License Fees	15,327	1		15,327	-	-	-	-	-	-
Meals	2,190	1		2,190	-	-	-	-	-	-
Recruiter Fees	8,851	1		8,851	-	-	-	-	-	-
Engineering Dept Expense	105,970	4		-	-	-	105,970	-	-	-
Engineering Vehicles	12,890	4		-	-	-	12,890	-	-	-
Engineering - Fuel Purchased	20,385	4		-	-	-	20,385	-	-	-
Engineering - Vehicle Registration	4,488	4		-	-	-	4,488	-	-	-
Maint of Communication Equip	23,570	2		-	23,570	-	-	-	-	-
Computer Maintenance	590,310	1		590,310	-	-	-	-	-	-
Depreciation - 2403 & Amort										
Comm Depreciation	53,162	2		-	53,162	-	-	-	-	-
Computer Depreciation	826,915	1		826,915	-	-	-	-	-	-
Office Furniture Depreciation	13,389	1		13,389	-	-	-	-	-	-
Leasehold Improvements-15 year property	6,796	1		6,796	-	-	-	-	-	-
Union Negotiations - 2013	-	1		-	-	-	-	-	-	-
Union Negotiations - 2015	-	1		-	-	-	-	-	-	-
Union Negotiations - 2017	1,476	1		1,476	-	-	-	-	-	-
Total Allocable Expenses	$ 8,470,160			5,133,886	1,705,294	-	1,414,489	216,491	-	-

Tier 1 - use the corporate expense allocation between TSC, PWSC and regulated utilities. The allocation among utilities will be based on total assets and customers.
Tier 2 - allocate to PWW, PEU, PAC and PWSC based on total assets and customers
Tier 3 - allocate to PWW, PEU and PWSC based on total assets and customers
Tier 4 - allocate to the regulated utilities (PWW, PEU and PAC) based on total assets and customers.
(1) Retention/Bonus, Overtime, Merit increases and summer temp help are included in Officers' and Office Salaries
(2) Outside Services include temporary help from temporary services providers
(3) Effectively, all Admin & Gen Expense (incl. Engineering) are allocated less Insurance, Regulatory Commission, Memberships, Misc General, Public Relations and Charitable Contributions and Union Benefits

Allocation Calculation - Tier 1 (All Companies)

	PWW	PEU	Pittsfield	Total Regulated	Con Ops (PWS)1	Real Estate (TSC)[1]	Total	Check Total
Revenues[4]	32,280,395	8,819,088	774,537	$ 41,874,020	2,892,868	12,033	$ 44,778,922	
				93.51%	6.46%	0.03%	100.00%	
Employees (FTE's) - 2019				128	1	0	129	
(excluding employees without benefits)				99.22%	0.78%	0.00%	100.00%	
Square Footage - w/ addt'l lease space				19,421	196	0	19,617	
Manchester Street Facility[5]				99.00%	1.00%	0.00%	100.00%	
Total Assets[2]	$ 267,705,032	$ 66,609,561	$ 4,461,150	$ 338,775,744	$ 249,629	$ 365,332	$ 339,390,705	
	79.02%	19.66%	1.32%	99.82%	0.07%	0.11%	100.00%	
Customers[3]	29,006	8,248	639	37,893				
	76.55%	21.77%	1.69%	100.01%				
Average Percentage	77.79%	20.72%	1.51%	97.89%	2.08%	0.04%	100.01%	
Allocation of Allocable Expenses	3,907,979	1,041,190	75,878	5,025,047	106,785	2,054	$ 5,133,886	$ -
Effective Allocation %	76.12%	20.28%	1.48%		2.08%	0.04%		

1 - PWS - 100% of 1 employee
2 - Based on December 2019 Preliminary Less Intercompany Account Balances
3 - Based on December 2019 Actuals
4 - Based on December 2019 Preliminary

Allocation Calculation - Tier 2 (All Regulated Companies plus PWSC)

	PWW	PEU	Pittsfield	Total Regulated	Con Ops (PWS) 1	Real Estate (TSC)	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561	$ 4,461,150	$ 338,775,744	$ 249,629	$ -	$ 339,025,373	
	79.02%	19.66%	1.32%	99.93%	0.07%	0.00%	100.00%	
Customers[3]	29,006	8,248	639	37,893	8,131	0	46,024	
	76.55%	21.77%	1.69%	82.33%	17.67%			
Average Percentage	77.79%	20.72%	1.51%	91.13%	8.87%		100.00%	
Allocation of Allocable Expenses	1,208,572	321,996	23,466	1,554,034	151,260	0	$ 1,705,294	$ -
Effective Allocation %	70.87%	18.88%	1.38%		8.87%	N/A		

1 - PWS customers based on municipality customers and pro rated based on services rendered

Allocation Calculation - Tier 3 (PWW, PEU and PWSC)

	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561		$ 249,629		$ 334,564,223	
	80.02%	19.91%		0.07%		100.00%	
Customers[3]	29,006	8,248		8,131		45,385	
	63.91%	18.17%		17.92%		100.00%	
Average Percentage	71.97%	19.04%		9.00%		100.01%	
Allocation of Allocable Expenses	$ -	$ -	0	$ -	0	$ -	$ -
Effective Allocation %	#DIV/0!	#DIV/0!	N/A	#DIV/0!	N/A		

Allocation Calculation - Tier 4 (Regulated Companies)

	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)[1]	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561	$ 4,461,150			$ 338,775,744	
	79.02%	19.66%	1.32%			100.00%	
Customers[3]	29,006	8,248	639			37,893	
	76.55%	21.77%	1.69%			100.01%	
Average Percentage	77.79%	20.72%	1.51%			100.02%	
Allocation of Allocable Expenses	$ 1,100,048	$ 293,082	$ 21,359	0	0	$ 1,414,489	$ -
Effective Allocation %	77.77%	20.72%	1.51%	N/A	N/A		

Specific Allocation Calculations - Tier 5-7

	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)[1]	Total	Check Total
Direct Allocable Costs	0	0	-	216,491	0	216,491	$ -
	N/A	N/A			N/A		

Summary of Allocations	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)	Totals	unallocated PAC/PEU	Total	Check Total
Tier 1	3,907,979	1,041,190	75,878	106,785	2,054	5,133,886			
Tier 2	1,208,572	321,996	23,466	151,260	-	1,705,294			
Tier 3	-	-	-	-	-	-			
Tier 4	1,100,048	293,082	21,359	-	-	1,414,489			
PWSC only and PAC only	-	-	-	216,491	-	216,491			
Total Allocations	6,216,598	1,656,268	120,703	474,536	2,054	8,470,160	-	8,470,160	-
	73.39%	19.55%	1.43%	5.60%	0.02%	100.00%			

PWSC Customers	Operations	Water Supply	Billing	Cust Svc	Customers	Customers
Salisbury	0.250	0.250	0.250	0.250	3,700	3,700
Boscawen	0.250	0.250	0.083	0.083	1,190	793
Amesbury	-	-	0.167	0.167	5,800	1,937
Rowley	-	-	0.250	0.250	1,880	940
Eastham	-	-	0.125	0.125	800	200
Wellfleet	-	-	0.125	0.125	264	66
Woodstock	0.250	0.250	-	-	990	495
						8,131 *

Note: Customer Counts updated 11/13/2019

Pennichuck Water Works
Work Order Allocation of Operations and Production Expenses
For Month Ending 12/31/2019

Full Year Amounts (to be allocated)	
Wages	
Superintendence - WTP	262,269
Office Salaries & Wages: WTP	330,772
Purification Labor	227,664
Superintendence - Operations	339,564
Office Salaries - Operations	115,210
Benefits	
Superintendence - WTP	127,804
Office Salaries & Wages: WTP	161,185
Purification Labor	110,941
Superintendence - Operations	165,469
Office Salaries - Operations	56,142
Facilities - Will Street	
Maint: Meter Department	233
Will Street Parking	-
Will Street Office Supplies	13,068
Will Street Gas	7,842
Will Street Electric	35,337
Will Street Phone	41,565
Miscellaneous Charges	
Misc Gen Exp Ops	69,826
Misc T&D Materials & Supplies	17,300
Stores Expense	55,730
Small Tools Expense	35,406
OPS - Non-Union Vehicles	798
WTP - Non-Union Vehicles	6,565
Misc.Transport Expense	71,406
Non-Union Vehicle Fuel Costs	32,523
Misc Gen Equipment Exp	36,224
Depreciation - 2304	
16 DW Highway	184,471
Tools, Shop & Garage	44,785
Other Tangible Equipment-Misc Equip	26,102
Non-Union Transporation Depreciation	51,629
Total Allocable Expenses	**2,627,831**

2019 Workorder Costs

	PWW Capital	070 WTP Maintenance	080 OPS Maintenance	Fleet	PWW Jobbing	PWS Maintenance	PWS Jobbing	PAC Capital	PAC Maintenance	PEU Capital	PEU Maintenance	Total	
Labor	58,274.36	894,072.37	1,745,057.06	77,818.68	48,707.59	425,823.36	56,554.82	3,732.23	83,624.18	27,095.30	762,210.60	4,182,970.55	
Contractor Clearing	114,695.11	-	-	166,958.84	11,722.11	-	473,888.18	2,696.82	-	100,281.44	-	870,242.50	
Inventory: Pipes & Fittings	26,534.47	499.80	74,290.19	-	22,408.08	76.73	921.42	456.88	723.69	10,361.10	17,887.35	154,159.71	
Inventory: Meters	222,176.17	-	2,846.41	-	-	-	2,352.80	1,540.41	320.12	89,738.39	2,923.76	321,898.06	
Inventory: Misc T&D	55.17	-	40.56	-	-	-	-	-	-	-	25.97	121.70	
Inventory: Chemicals	-	913,828.98	-	-	-	-	10,233.07	-	-	-	66,041.51	990,103.56	
Inventory: Fleet	-	-	-	3,220.49	-	-	-	-	-	-	-	3,220.49	
Inventory: Backup Gen Fuel	-	-	-	-	-	-	-	-	-	-	-	-	
Misc T&D Supplies	-	-	-	-	-	-	-	-	-	-	-	-	
Truck	24,529.25	89,684.75	332,620.75	2,024.75	20,294.75	134,802.50	14,904.70	1,345.75	8,863.75	10,028.50	228,599.00	867,698.45	
Backhoe	7,582.75	677.50	37,128.00	-	6,201.75	194.75	612.50	433.75	1,058.25	3,250.50	12,870.25	70,010.00	
Compressor	-	-	4,189.50	-	-	-	-	-	-	-	1,083.00	5,272.50	
Inspection Fees	-	-	-	-	123,612.00	-	-	-	-	-	-	123,612.00	
Overhead	9,112.72	-	-	-	39,004.45	-	-	252.98	-	5,054.04	-	53,424.19	
Labor Overhead	37,229.44	565,411.37	1,103,574.08	49,212.53	47,320.49	264,601.01	36,260.73	2,439.34	44,507.85	17,366.31	488,205.04	2,656,128.19	
Misc General Equipment	-	-	-	-	-	-	-	-	-	-	-	-	
Total Costs	500,189.44	2,464,174.77	3,299,746.55	299,235.29	319,271.22	825,498.35	595,728.22	12,898.16	139,097.84	263,175.58	1,579,846.48	10,298,861.90	
Total Costs w/o OH & CW	376,381.61	2,464,174.77	3,299,746.55	132,276.45	268,544.66	825,498.35	121,840.04	9,948.36	139,097.84	157,840.10	1,579,846.48	9,375,195.21	
% of Total	4.86%	23.93%	32.04%	2.91%	3.10%	8.02%	5.78%	0.13%	1.35%	2.56%	15.34%	100.00%	
% of Total w/o OH & CWIP	4.01%	26.28%	35.20%	1.41%	2.86%	8.81%	1.30%	0.11%	1.48%	1.68%	16.85%	100.00%	
Ovhd Allocable to Work Orders													
2,627,831	127,627	628,752	841,955	76,352	81,464	210,632	152,004	3,291	35,492	67,151	403,109	2,627,829	
Totals by Company:													
PWW	127,627	628,752	841,955	76,352	81,464							1,756,150	66.8%
PEU										67,151	403,109	470,260	17.9%
PAC								3,291	35,492			38,783	1.5%
PWS						210,632	152,004					362,636	13.8%
Total Overhead	127,627	628,752	841,955	76,352	81,464	210,632	152,004	3,291	35,492	67,151	403,109	2,627,829	100.0%
% Labor	0.01	0.21	0.42	0.02	0.01	0.10	0.01	0.00	0.02	0.01	0.18	1.00	
												1.00	

Pennichuck Water Works
Return on Common Assets Allocation (to other Subsidiary Companies)
For Month Ending 12/31/2019

Provided pursuant to NHPUC Rule 1604.01(25)

Effective Tax Rate - current **27.08%**

			12								
	4.82%						Dollars Applicable to:				
Full Year Amounts (to be allocated)	**Rate of Return**	**Net Book Value**	**Tier Allocation Required**	**Tier 1 (All)**	**Tier 2 (Regulated + PWSC)**	**Tier 3 (PWW+PEU+ PWSC)**	**Tier 4 (Regulated)**	**PWSC Only**	**PAC Only**	**TSC Only (budgeted specifically on TSC P/L)**
Office Furniture & Equipment	2,084	43,226	1	2,084	-	-	-	-	-	-
Transportation Equipment	98,110	2,035,475	2	-	98,110	-	-	-	-	-
Tools, Shop & Garage Equipment	18,627	386,446	3	-	-	18,627	-	-	-	-
Construction Meters	121	2,504	2	-	121	-	-	-	-	-
Power Operated Equipment	10,175	211,089	2	-	10,175	-	-	-	-	-
Communication Equipment	25,227	523,382	4	-	-	-	25,227	-	-	-
Computer Equipment	134,955	2,799,892	1	134,955	-	-	-	-	-	-
Other Plant and Misc Equipment	20,590	427,173	4	-	-	-	20,590	-	-	-
Leasehold Improvements	635	13,166	1	635	-	-	-	-	-	-
16 DW Highway	333,632	6,921,824	3	-	-	333,632	-	-	-	-
Will Street Expansion	-	-	3	-	-	-	-	-	-	-
Deferred Pension Costs	494,957	10,268,820	1	494,957	-	-	-	-	-	-
Deferred Post Retirement Health	51,943	1,077,660	1	51,943	-	-	-	-	-	-
Deferred Post Employment Health	-	-	1	-	-	-	-	-	-	-
Deferred SERP	38,030	789,010	1	38,030	-	-	-	-	-	-
VEBA Trust - Union	22,204	460,665	1	22,204	-	-	-	-	-	-
VEBA Trust - Non-union	6,911	143,375	1	6,911	-	-	-	-	-	-
Union Negotiations - 2013	-	-	1	-	-	-	-	-	-	-
Union Negotiations - 2015	-	-	1	-	-	-	-	-	-	-
Deferred Pension Costs		10,268,820								
Deferred Post Employment Health		-								
Deferred Post Retirement Health		1,077,660								
Deferred SERP		789,010								
Less: Accrued Liability Pension - ST		-								
Less: Accrued Liability Pension - LT		(12,970,815)								
Less: Post Employment Health Liability - ST		-								
Less: Post Employment Health Liability - LT		-								
Less: Accrued Liability SERP		(380,788)								
VEBA Trust - Union		460,665								
VEBA Trust - Non-union		143,375								
Less: Post Retirement Liability Health - ST		-								
Less: Post Retirement Liability Health - LT		(4,585,921)								
Subtotal		(5,197,996)								
Less: Tax Impact at current effective tax rate		1,407,617								
Net Impact Unfunded FAS 106 & FAS 158 Costs	(182,696)	(3,790,378)	1	(182,696)	-	-	-	-	-	-
Total Allocable Expenses	1,075,505	22,313,328.42		569,023	108,406	352,259	45,817	-	-	-

Note: Rate of Return based on YTD NBV/12#months

Tier 1 - use the corporate expense allocation between TSC, PWSC and regulated utilities. The allocation among utilities will be based on total assets and customers.
Tier 2 - allocate to PWW, PEU, PAC and PWSC based on total assets and customers
Tier 3 - allocate to PWW, PEU and PWSC based on total assets and customers
Tier 4 - allocate to the regulated utilities (PWW, PEU and PAC) based on total assets and customers.
Note: Laboratory Equipment not included. Currently, PWW charges a $15 fee for all lab work which is considered to be a competitive price and $5 higher than charged by the State of New Hampshire.

Allocation Calculation - Tier 1 (All Companies)

	PWW	PEU	Pittsfield	Total Regulated	Con Ops (PWS)1	Real Estate (TSC)[1]	Total	Check Total
Revenues[4]	32,280,395	8,819,088	774,537	$ 41,874,020	2,892,868	12,033	$ 44,778,922	
				93.51%	6.46%	0.03%	100.00%	
Employees (FTE's) - 2019				128	1	0	129	
(including summer help)				99.22%	0.78%	0.00%	100.00%	
Square Footage - w/ addt'l lease space				19,421	196	0	19,617	
Manchester Street Facility				99.00%	1.00%	0.00%	100.00%	
Total Assets[2]	267,705,032	66,609,561	4,461,150	338,775,744	249,629	$ 365,332	$ 339,390,705	
	79.02%	19.66%	1.32%	99.82%	0.07%	0.11%	100.00%	
Customers[3]	29,006	8,248	639	37,893				
	76.55%	21.77%	1.69%	100.00%				
Average Percentage	77.78%	20.71%	1.50%	97.89%	2.08%	0.04%	100.01%	
Allocation of Allocable Expenses	433,259	115,346	8,354	556,959	11,836	228	$ 569,023	$ -
Effective Allocation %	76.14%	20.27%	1.47%		2.08%	0.04%		

1
2
3
4

Allocation Calculation - Tier 2 (All Regulated Companies plus PWSC)

	PWW	PEU	Pittsfield		Total Regulated	Con Ops (PWS) 1	Real Estate (TSC)	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561	$ 4,461,150		$ 338,775,744	$ 249,629	$ -	$ 339,025,373	
	79.02%	19.66%	1.32%		99.93%	0.07%	0.00%	100.00%	
Customers[3]	29,006	8,248	639	-	37,893	8,131	0	46,024	
	76.55%	21.77%	1.69%		82.33%	17.67%			
Average Percentage	77.79%	20.72%	1.51%		91.13%	8.87%		100.00%	
Allocation of Allocable Expenses	76,829	20,469	1,492		98,790	9,616	0	$ 108,406	$ -
Effective Allocation %	70.87%	18.88%	1.38%			8.87%	N/A		

[1] - PWS customers based on municipality customers and pro rated based on services rendered

Allocation Calculation - Tier 3 (PWW, PEU and PWSC)

	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561		$ 249,629		$ 334,564,223	
	80.02%	19.91%		0.08%		100.00%	
Customers[3]	29,006	8,248		8,131		45,385	
	63.91%	18.17%		17.92%		100.00%	
Average Percentage	71.96%	19.04%		9.00%		100.00%	
Allocation of Allocable Expenses	$ 253,486	$ 67,070	0	$ 31,703	0	$ 352,259	$ -
Effective Allocation %	71.96%	19.04%	N/A	9.00%	N/A		

Allocation Calculation - Tier 4 (Regulated Companies)

	PWW	PEU	Pittsfield	Con Ops (PWS)	Real Estate (TSC)[1]	Total	Check Total
Total Assets[2]	$ 267,705,032	$ 66,609,561	$ 4,461,150			$ 338,775,744	
	79.02%	19.66%	1.32%			100.00%	
Customers[3]	29,006	8,248	639			37,893	
	76.55%	21.77%	1.69%			100.00%	
Average Percentage	77.78%	20.71%	1.50%			99.99%	
Allocation of Allocable Expenses	$ 35,641	$ 9,489	$ 687	0	0	$ 45,817	$ -
Effective Allocation %	77.79%	20.71%	1.50%	N/A	N/A		

Specific Allocation Calculations - Tier 5-7

	PWW	PEU	Pittsfield	North Country	Con Ops (PWS)	Real Estate (TSC)[1]	Total	Check Total
Direct Allocable Costs	0	0	-		-	0	-	$ -
	N/A	N/A				N/A		

Summary of Allocations

	PWW	PEU	Pittsfield	North Country	Con Ops (PWS)	Real Estate (TSC)	Totals	unallocated TSC	Check Total
Tier 1	433,259	115,346	8,354	-	11,836	228	569,023		
Tier 2	76,829	20,469	1,492	-	9,616	-	108,406		
Tier 3	253,486	67,070	-	-	31,703	-	352,259		
Tier 4	35,641	9,489	687	-	-	-	45,817		
PWSC only and PAC only	-	-	-	-	-	-	-		
Total Allocations	799,215	212,374	10,533	-	53,155	228	1,075,505	-	-
	74.31%	19.75%	0.98%	0.00%	4.94%	0.02%	100.00%		

Summary Transfers from PWW Operating to Other Companies
Full Year Amounts

	Annual Amts	Monthly Amts
PWW operating expense allocation - PWW	$ (276,290)	$ (23,025)
PWW operating expense allocation - PEU	$ 212,374	$ 17,698
PWW operating expense allocation - Pittsfield	$ 10,533	$ 878
PWW operating expense allocation - PCP	$ -	$ -
PWW operating expense allocation - PWS	$ 53,155	$ 4,430
PWW operating expense allocation - TSC	$ 228	$ 19
Check Totals	$ -	$ -

Pennichuck Corporation
Mgmt Fee Expense Allocation (to other Subsidiary Companies)
For Month Ending 12/31/2019

Provided pursuant to NHPUC Rule 1604.01(25)

Professional Fees	20,354
D&O Insurance	33,376
Annual Report Cost & Meeting	1,118
Auditors Expense/SEC Legal	113,578
Corp Governance Legal/American Stock Transfer	-
Directors Fees & Meetings/Corporate Secretary	-
EDGAR Filing/NASDAQ/All Other Misc	-
Board of Directors	128,410
Board of Directors Education & Training	-
Total Allocable Expense	**296,836**

Allocation Calculation - level 1 (All Companies)

	PWW	PEU	Pittsfield	Total Regulated	Con Ops (PWS)	Real Estate (TSC)	Total	Check Total
Revenues	$ 32,280,395	$ 8,819,088	$ 774,537	$ 41,874,020	$ 2,892,868	$ 12,033	$ 44,778,922	
Financial Prelims	72.09%	19.70%	1.73%		6.46%	0.03%	100.00%	
Total Assets	$ 267,705,032	$ 66,609,561	$ 4,461,150	$ 338,775,744	$ 249,629	$ 365,332	$ 339,390,705	
Financial Prelims	78.88%	19.63%	1.31%		0.07%	0.11%	100.00%	
Average Percentage	75.48%	19.66%	1.52%		3.27%	0.07%	100.00%	
Allocation of Allocable Expenses	224,060	58,359	4,518	$ 286,938	9,698	200	$ 296,836	$ -

Summary Transfers from PCP Operating to Other Companies - Full Year Amounts

	YTD Costs	Current Balance	Monthly Adj
PCP Mgmt Fee Expense Allocation - PCP	$ (296,835)	$ (273,692)	(23,143)
PCP Mgmt Fee Expense Allocation - PWW	$ 224,060	$ 206,390	17,670
PCP Mgmt Fee Expense Allocation - PEU	$ 58,359	$ 53,235	5,124
PCP Mgmt Fee Expense Allocation - PAC	$ 4,518	$ 4,151	367
PCP Mgmt Fee Expense Allocation - PWS	$ 9,698	$ 8,898	800
PCP Mgmt Fee Expense Allocation - TSC	$ 200	$ 1,018	(818)
Check Totals	$ -	$ -	$ -

Summary of 2019 Allocated Costs
Year to Date Costs through December 31, 2019
Pennichuck Corporation and Subsidiaries
(Dollar amounts in $ 000's)

	Penn Water	Penn East	Pittsfield	Total Regulated	Con Ops(PWSC)	Real Estate(TSC)	Total
Allocated Corporate Costs	$ 224,060	$ 58,359	$ 4,518	$ 286,938	$ 9,698	$ 200	$ 296,836
%	75.5%	19.7%	1.5%	96.7%	3.3%	0.1%	100.0%
Allocated Return on Common Assets	799,215	212,374	10,533	$ 1,022,122	53,155	228	$ 1,075,505
	74.3%	19.7%	1.0%	95.0%	4.9%	0.0%	100.0%
Allocated Pennichuck Water Costs - Work Orders	1,756,150	470,260	38,783	$ 2,265,193	362,636	-	$ 2,627,829
%	66.8%	17.9%	1.5%	86.2%	13.8%	0.0%	100.0%
Allocated Pennichuck Water Costs - Management Fee	6,216,598	1,656,268	120,703	$ 7,993,569	474,536	2,054	$ 8,470,160
%	73.4%	19.6%	1.4%	94.4%	5.6%	0.0%	100.0%
Total Allocated 2019 Costs	$ 8,996,026	$ 2,397,262	$ 174,537	$ 11,567,825	$ 900,025	$ 2,482	$ 12,470,332
%	72.1%	19.2%	1.4%	92.8%	7.2%	0.0%	100.0%

PREPARED BY: DATE:

REVIEWED & APPROVED BY:______________________ DATE:__________

Summary of 2019 Allocated Costs
Year to Date Costs through December 31, 2019
Pennichuck Corporation
(Dollar amounts in $ 000's)

	Penn Water	Penn East	Pittsfield	Total Regulated	Con Ops(PWSC)	Real Estate(TSC)	Total
Allocated Corporate Costs	$ 224,060	$ 58,359	$ 4,518	$ 286,938	$ 9,698	$ 200	$ 296,836
%	75.5%	19.7%	1.5%	96.7%	3.3%	0.1%	100.0%

Summary Transfers from PCP Operating to Other Companies - Full Year Amounts

	YTD Costs	Current Balance	Monthly Adj
PCP Mgmt Fee Expense Allocation - PCP	$ (296,835)	(273,692)	(23,143)
PCP Mgmt Fee Expense Allocation - PWW	$ 224,060	206,390	17,670
PCP Mgmt Fee Expense Allocation - PEU	$ 58,359	53,235	5,124
PCP Mgmt Fee Expense Allocation - PAC	$ 4,518	4,151	367
PCP Mgmt Fee Expense Allocation - PWS	$ 9,698	8,898	800
PCP Mgmt Fee Expense Allocation - TSC	$ 200	1,018	(818)
Check Totals	$ -	$ -	$ -

Summary of 2019 Allocated Costs
Year to Date Costs through December 31, 2019
Pennichuck Water Works
(Dollar amounts in $ 000's)

	Penn Water	Penn East	Pittsfield	Total Regulated	Con Ops(PWSC)	Real Estate(TSC)	Total
Allocated Return on Common Assets	799,215	212,374	10,533	$ 1,022,122	53,155	228	$ 1,075,505
%	74.3%	19.7%	1.0%	95.0%	4.9%	0.0%	100.0%
Allocated Pennichuck Water Costs - Work Orders	1,756,150	470,260	38,783	$ 2,265,193	362,636	-	$ 2,627,829
%	66.8%	17.9%	1.5%	86.2%	13.8%	0.0%	100.0%
Allocated Pennichuck Water Costs - Management Fee	6,216,598	1,656,268	120,703	$ 7,993,569	474,536	2,054	$ 8,470,160
%	73.4%	19.6%	1.4%	94.4%	5.6%	0.0%	100.0%
Total Allocated 2019 Costs	$ 8,771,963	$ 2,338,902	$ 170,019	$ 11,280,884	$ 890,327	$ 2,282	$ 12,173,494
%	72.1%	19.2%	1.4%	92.7%	7.3%	0.0%	100.0%

Summary Transfers from PWW Operating to Other Companies - Full Year Amounts

	YTD Costs	Current Balance	Monthly Adjustment
PWW operating expense allocation - PWW	$ (3,401,530)	(3,107,986)	$ (293,544)
PWW operating expense allocation - PEU	$ 2,338,902	2,124,005	$ 214,897
PWW operating expense allocation - PAC	$ 170,019	154,156	$ 15,863
PWW operating expense allocation - PCP	$ -	-	$ -
PWW operating expense allocation - PWS	$ 890,327	820,135	$ 70,192
PWW operating expense allocation - TSC	$ 2,282	9,690	$ (7,408)
Check Totals	$ 0	$ -	$ -

Step Allocation of Benefits

2018 Benefits	Total Dollars	Non-Union Wage Portion	Union Wage Portion	Total with Adjustments		
Officer's Life Insurance	**5,979**	5,979	-	5,979		
Pension - DB Plan	**1,325,040**	766,908	558,132	1,325,040		
Group Pension: 401K	**273,408**	158,243	115,165	273,408		
Post Retirement Health Expense	**-**	-	-	-		
Post Employment Health Expense	**262,140**	147,982		147,982		
Group Health Insurance	**1,848,066**	1,043,263	804,803	1,848,066		
Health Insurance: Opt Out	**21,000**	11,855	9,145	21,000		
Group Dental	**218,636**	123,424	95,212	218,636		
Group Life/Disability Insurance	**39,756**	22,443	17,313	39,756		
Misc Employee Benefits	**38,820**	21,915	16,905	38,820		
Tuition Reimbursements	**47,778**	26,971	20,807	47,778		
Training Educational Seminars	**152,676**	74,326	78,350	152,676		
Boot & Clothing Allowance-OPS	**378,365**	-	378,365	378,365		
Boot & Clothing Allowance-CS-Union	**6,744**	-	6,744	6,744		
Boot & Clothing Allowance-WTP	**220,050**	-	220,050	220,050		
Vacation Earned YTD (per Acc Vac Rpt) Union Only	**32,776**	-	36,165	36,165		
Payroll Taxes:						
Employer FICA/Medicare	**682,703**	395,135	287,568	682,703		
FUTA	**5,866**	3,395	2,471	5,866		
SUI	**7,942**	4,597	3,345	7,942		
Total Benefits	**5,567,745**	**2,806,436**	**2,650,540**	**5,456,976**		
Benefits % (of wages)	57.5%	**48.73%**	**63.24%**		**Update in Synergen for new year**	
Total Wages thru 12/31/18	**9,647,133**	**5,565,974**	**4,081,159**			**Wages per Payroll (Paylocity)**
Less: Accrued Wages 12/31/17	**(181,675)**	**(101,267)**	**(80,408)**			**Year End Payroll Accrual Entry**
Add: Accrued Wages thru current year-end	**214,880**	**126,599**	**88,281**			**Current Year end Payroll Accrual**
Grand Total Wages	**9,680,339**	**5,591,306**	**4,089,032**			
Grand Total Wages + 2019 wage increases	**9,950,304**	**5,759,045**	**4,191,258**		**Non-union 3% - Union 2.5%**	
%	100.0%	57.8%	42.2%			
Total Headcount	124	70	54			
(Excluding Summer Help)	100.0%	56.5%	43.5%			

Health Insurance Calculation

2019 Budget YTD	1,848,066	
2019 - Union % (Based on Actual Participation at 01/01/2019)	43.55%	804,803
2019- Non-Union % (Based on Actual Participation @ 01/01/2019)	56.45%	1,043,263
	100.00%	1,848,066

Dental Insurance Calculation

2019 Budget YTD	218,636	
2019 - Union % (Based on Actual Participation at 01/01/2019)	43.55%	95,212
2019- Non-Union % (Based on Actual Participation @ 01/01/2019)	56.45%	123,424
	100.00%	218,636

Grand Total Wages Calculation

Union	4,089,032	2.50%	4,191,258
Non-Union	5,591,306	3.00%	5,759,045
	9,680,339		9,950,304

Employer FICA/Medicare

	682,703	actual + % wage increase
Union	287,568	
Non-Union	395,135	
	682,703	

Group Pension: 401K

	273,408	Budget
Union	115,165	
Non-Union	158,243	
	273,408	

Vacation Earned YTD

Union Carryover	32,776	33,595	2.50%
		7.65%	
Total including FICA & MED Tax		36,165	

TAB 34

1604.01(a)(19) Balance Sheets and Income Statements for Previous Two Years

Pittsfield Aqueduct Company
Profit & Loss Statement
For the Twelve Months Ended December 31, 2019

Provided pursuant to NHPUC Rule 1604.01(19)

	1	2	3	4	5	6	7	8	9	10	11	12
	Jan-19	**Feb-19**	**Mar-19**	**Apr-19**	**May-19**	**Jun-19**	**Jul-19**	**Aug-19**	**Sep-19**	**Oct-19**	**Nov-19**	**Dec-19**
Water Sales												
WATER SALES: BILLED REVENUE	(47,026.97)	(50,063.69)	(45,427.73)	(42,184.10)	(44,429.66)	(51,805.24)	(43,799.15)	(54,588.29)	(47,899.02)	(47,523.91)	(52,038.82)	(43,333.87)
WATER SALES BILLED RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-
WATER SALES: UNBILLED REVENUE	6,228.00	5,422.00	(3,197.00)	(6,984.00)	694.00	4,228.00	(2,694.00)	(41.00)	(2,896.00)	3,502.00	4,650.00	(5,795.00)
WATER SALES-UNBILLED RECOUPMNT	-	-	-	-	-	-	-	-	-	-	-	-
FIRE PROTECTION REVENUE	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)
CBFRR REVENUES	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)
CBFRR REVENUES - CONTRA	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25
	57,871.53	61,714.25	65,697.29	66,240.66	60,808.22	64,649.80	63,565.71	71,701.85	67,867.58	61,094.47	64,461.38	66,201.43
Other Operating Revenue												
MISC OPERATING REVENUE	(121.00)	(20.00)	(202.00)	(310.00)	(135.00)	(315.00)	(112.00)	(201.00)	(478.00)	(218.00)	(324.00)	(227.00)
	121.00	20.00	202.00	310.00	135.00	315.00	112.00	201.00	478.00	218.00	324.00	227.00
Total Revenues	57992.53	61734.25	65899.29	66550.66	60943.22	64964.8	63677.71	71902.85	68345.58	61312.47	64785.38	66428.43
Production Expenses												
OTHER PROD LABOR:TREAT PLANT	-	-	-	-	-	-	-	-	-	-	-	-
OTHER PROD MAT&EXP: SRC/SUPPLY	0	0	0	0	0	0	0	0	0	0	0	0
SUPERINTENDENCE: WTP-PAC	0	0	0	0	0	0	0	0	0	0	0	0
BENEFITS: WTP-PAC	-	-	-	-	-	-	-	-	-	-	-	-
POWER PURCHASED: TRT PLT ELEC	783.29	953.53	913.95	866.69	767.42	604.99	483.16	541.40	498.01	484.16	553.78	581.64
OPER LABOR: TREATMENT PLANT	5,757.13	3,893.97	6,423.65	4,966.23	5,683.89	5,215.53	4,963.67	5,445.91	6,701.50	6,365.20	6,594.54	7,132.30
OPER EXP T PLANT: MAT & EXP	467.40	74.99	1,657.62	274.76	414.67	253.21	80.04	224.00	123.26	241.15	129.02	448.37
OPER EXP T PLANT: GAS/OIL	2,093.75	1,970.35	410.00	655.32	2,698.20	-	-	-	-	359.78	-	507.57
OPER EXP T PLANT: PHONE	77.21	189.01	189.01	186.12	186.05	186.05	189.30	190.41	190.41	190.88	190.77	228.30
MAINT STRUCT: TREATMENT PLANT	158.05	1,204.45	(1,140.27)	48.27	-	1,047.98	2,900.52	876.76	76.76	444.44	-	111.25
MAINT STRUCT: SOURCE OF SUPPLY	3,463.22	2,050.99	781.07	-	850.58	102.17	199.89	1,169.93	367.82	2,404.92	5,421.26	1,259.51
MAINT PUMP EQU: HIGH LIFT ELC	-	-	-	-	-	-	-	-	-	-	-	-
BOOSTER STATION GENERAL MAINT	-	31.90	-	-	-	203.26	-	-	-	-	-	-
CHLORINE: TREATMENT PLANT	334.55	-	469.10	527.90	-	138.95	564.45	-	238.95	213.95	-	238.95
ALUM. SULFATE/FERRIC CHLORIDE	-	-	-	-	882.00	-	-	-	-	-	-	882.00
POLYMERS	-	-	-	-	-	-	-	-	-	-	-	-
CORROSION INHIBITOR	-	-	-	-	-	-	-	-	-	-	-	-
SODA ASH	-	891.00	-	-	-	-	-	-	-	-	-	-
LABORATORY EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-
LAB EXPENSE: OUTSIDE TESTING	353.00	101.00	14.00	448.00	101.00	97.00	586.00	97.00	92.00	353.00	97.00	97.00
MAINT PROC EQU: TRT PLANT	-	-	92.39	230.00	1,840.39	-	92.05	375.54	-	-	1,152.99	1,415.38
MAINT PROC EQUIP: SCADA & OTHR	118.20	208.96	118.20	118.20	118.20	118.20	326.19	89.18	236.40	120.20	120.20	120.20
	13,605.80	11,570.15	9,928.72	8,321.49	13,542.40	7,967.34	10,385.27	9,010.13	8,525.11	11,177.68	14,259.56	13,022.47
Transmission & Distribution Expenses												
SUPERINTENDENCE: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
BENEFITS: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
MISC GEN EXPENSE/OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
MISC T&D MATERIALS & SUPPLIES	-	-	-	-	-	-	-	-	-	-	-	-
DUTY PAY	-	-	-	-	-	-	-	-	-	-	-	-
METER OPERATING LABOR & EXP	559.58	810.51	443.47	113.17	29.94	2,004.61	684.93	1,096.30	305.60	826.82	1,817.35	628.89
MOLE: METER REMOVAL	-	-	-	-	-	-	-	-	-	-	-	-
OTHER EXPENSE ON CUST PREMISIS	142.56	-	259.20	-	-	-	-	-	-	-	-	-
SMALL TOOLS EXPENSE	57.60	-	-	15.97	4.99	-	-	-	-	-	-	-
TRANS/EXP: MISCELLANEOUS	-	-	-	-	-	-	-	-	-	-	-	-
GASOLINE	-	-	-	-	-	-	-	-	-	-	-	-
MAINT MAINS: REPAIRS	93.97	79.55	1,300.61	233.43	1,255.70	382.03	122.56	173.16	29.21	258.48	119.47	118.61
MAINT MAINS: GATE PROGRAM	-	-	-	-	-	-	-	-	-	-	-	-
MAINT MAINS: FLUSHING LN	-	-	-	-	-	-	-	-	-	-	-	-
MAINT GATES: INSPECTION: PAC	-	-	-	-	-	-	-	-	-	-	-	-
MAINTENANCE: SERVICES	554.38	3,430.31	134.74	118.85	1,291.63	9,220.59	5,825.61	2,105.60	56.56	4,104.37	8,733.96	1,024.94
MAINTENANCE: METERS	352.14	-	126.74	-	66.63	50.91	50.91	6.92	118.82	-	247.70	178.24
MAINTENANCE: HYDRANTS-REPAIRS	-	-	-	-	-	-	-	-	-	-	-	-

MAINTENANCE: HYDRANTS-PAINTING	-	-	-	-	-	-	-	-	-	-	-	-
MAINTENANCE: HYDRANTS-INSPECTN	1,354.26	126.74	411.90	704.61	124.51	196.62	226.33	228.28	322.48	509.04	188.31	250.62
MONITOR CONTRACTORS MARKING	-	31.68	286.54	288.62	1,092.24	708.36	497.27	483.67	422.43	546.83	345.06	64.00
	3,114.49	4,478.79	2,963.20	1,474.65	3,865.64	12,563.12	7,407.61	4,093.93	1,255.10	6,245.54	11,451.85	2,265.30
Customer Accounts & Collection Expenses												
CUSTOMER ORDS: COLLECTIONS	-	-	-	-	-	-	-	22.68	(22.68)	-	-	-
CUSTOMER ORDS: COLLECTIONS	-	-	231.67	-	-	107.59	368.77	54.32	169.25	245.46	-	204.14
METER READING	126.74	51.78	126.74	124.51	50.91	133.26	124.51	60.02	124.51	133.26	133.26	124.51
METER READING: TRANSFERS	31.68	57.33	59.82	165.54	66.64	104.37	188.97	58.94	253.41	84.87	82.21	151.68
METER READING: EXCEPTIONS	-	-	103.56	-	-	-	-	-	-	66.63	-	-
BILLING & ACCOUNTING	-	-	-	-	-	-	-	-	-	-	-	-
BILLING & ACCOUNTING	631.72	502.15	558.28	280.01	601.55	626.96	602.02	879.05	419.16	630.05	570.19	913.26
PUBLIC RELATIONS	-	-	12.29	1.05	11.12	-	-	-	-	24.00	51.58	12.29
UNCOLLECTABLE ACCOUNTS	65.00	30.97	-	-	394.41	399.36	1,744.81	-	-	-	1,020.01	442.09
	855.14	642.23	1,092.36	571.11	1,124.63	1,371.54	3,029.08	1,075.01	943.65	1,184.27	1,857.25	1,847.97
Administrative and General Expense												
OFFICE SUPPLIES & EXPENSE	9.17	11.30	9.50	6.65	15.80	11.95	5.50	7.00	11.80	7.50	5.00	14.45
OFFICE SUPPLIES & EXP: PHONE	299.76	292.89	296.41	296.20	296.20	296.21	296.50	297.39	297.39	297.40	297.39	297.66
OUTSIDE SERVICES	-	-	-	1.02	-	-	8,971.34	-	-	-	-	-
INSURANCE EXPENSE	815.65	964.15	889.90	889.89	889.89	889.89	889.89	889.89	889.89	887.07	889.90	867.51
REGULATORY COMMISSION EXPENSE	273.67	273.67	273.67	273.68	273.68	273.63	273.63	105.71	189.66	258.00	258.00	258.00
MEETING CONVENTION/MEMBSP FEES	-	-	-	-	-	-	-	-	-	-	-	-
LICENSING FEES	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
PUBLIC RELATIONS	20.18	-	-	-	-	-	-	-	-	-	-	-
MEALS	-	-	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS GENERAL EXPENSE	-	181.00	-	-	-	-	-	-	-	-	-	-
CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: OFFICE FURNT & EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: MISC GENERAL EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT COMPUTER EQUIP: PAC	-	-	-	-	-	-	-	-	-	-	-	-
	1,443.43	1,748.01	1,494.48	1,492.44	1,500.57	1,496.68	10,461.86	1,324.99	1,413.74	1,474.97	1,475.29	1,462.62
Inter Div Management Fee												
MAINT COMPUTER EQUIP: PAC	379.00	419.00	500.00	406.00	398.00	370.00	276.00	342.00	332.00	317.00	412.00	367.00
MAINT COMPUTER EQUIP: PAC	12,366.00	10,361.00	22,921.00	13,798.00	13,746.00	12,941.00	13,635.00	13,145.00	12,020.00	13,510.00	15,713.00	15,863.00
MAINT COMPUTER EQUIP: PAC	-	-	-	-	-	-	-	-	-	-	-	-
	12,745.00	10,780.00	23,421.00	14,204.00	14,144.00	13,311.00	13,911.00	13,487.00	12,352.00	13,827.00	16,125.00	16,230.00
Total Operating Expenses	31,763.86	29,219.18	38,899.76	26,063.69	34,177.24	36,709.68	45,194.82	28,991.06	24,489.60	33,909.46	45,168.95	34,828.36
Depreciation Expense												
DEPRECIATION EXPENSE: PAC	8,468.02	8,467.71	8,474.61	8,473.60	8,474.06	8,468.00	8,466.34	8,494.65	8,496.77	8,516.95	8,405.47	8,365.98
	8,468.02	8,467.71	8,474.61	8,473.60	8,474.06	8,468.00	8,466.34	8,494.65	8,496.77	8,516.95	8,405.47	8,365.98
Amortization Expense: CIAC												
AMORTIZATION EXPENSE: CIAC	(1,915.46)	(1,915.39)	(1,915.46)	(1,915.39)	(1,915.38)	(1,915.47)	(1,915.46)	(1,915.39)	(1,915.45)	(1,915.39)	(1,915.37)	(1,915.47)
Amortization Expense												
AMORT EXP - DEFERRED CHARGES	257.30	257.31	257.31	257.31	255.99	257.32	257.30	257.31	257.30	257.31	257.30	257.32
AMORT: ACQUISITION PREMIUM	2,800.17	2,868.09	2,868.07	2,868.07	2,868.08	2,868.08	2,868.08	2,868.07	2,868.09	2,868.07	2,868.07	2,868.09
	3,057.47	3,125.40	3,125.38	3,125.38	3,124.07	3,125.40	3,125.38	3,125.38	3,125.39	3,125.38	3,125.37	3,125.41
Taxes Other than Income Tax												
LOCAL PROPERTY TAXES	15,828.09	15,828.09	15,828.06	15,828.09	15,810.09	15,810.09	15,810.09	15,810.09	15,792.07	15,311.42	15,311.42	14,724.39
OTHER TAXES	-	-	-	-	-	-	-	-	-	-	-	1,258.00
	15,828.09	15,828.09	15,828.06	15,828.09	15,810.09	15,810.09	15,810.09	15,810.09	15,792.07	15,311.42	15,311.42	15,982.39
GAIN FROM FORGIVENESS SRF DEBT	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)
Income Tax												
PROV/FED INC TAX/CURRENT	**18.33**	**1,240.13**	**168.20**	**2,797.67**	**153.90**	**432.73**	**(1,472.49)**	**3,270.14**	**3,465.51**	**383.92**	**(1,097.05)**	**(1,235.99)**
PROVS FOR NH BUS PRFTS TAX CUR	7.49	506.55	68.69	1095.41	61.14	171.9	-584.96	1299.09	1376.69	152.51	-435.8	-1604.71
PROV FEDL INCOME TAX DEFERRED	-	0	0	0	0	0	0	0	0	0	0	3468
PROV NH INCOME TAX DEFERRED	-	-	-	-	-	-	-	-	-	-	-	(178.00)

	25.82	1,746.68	236.89	3,893.08	215.04	604.63	(2,057.45)	4,569.23	4,842.20	536.43	(1,532.85)	449.30
Total Operating Deducts	57,108.61	56,352.48	64,530.05	55,349.26	59,765.93	62,683.14	68,504.53	58,955.83	54,711.39	59,365.06	68,443.80	60,716.78
Net Operating Income	883.92	5,381.77	1,369.24	11,201.40	1,177.29	2,281.66	(4,826.82)	12,947.02	13,634.19	1,947.41	(3,658.42)	5,711.65
MISC NON-OPERATING INCOME(EXP)	-	-	-	-	-	-	-	-	-	-	-	-
MISC NONUTILITY EXPENSES	-	-	-	-	-	-	-	-	-	-	-	-
Other Income	-	-	-	-	-	-	-	-	-	-	-	-
AFDUC-INT(DEBT) COMPONENT-PAC	-	-	-	-	-	-	-	-	-	-	-	-
AFUDC - EQUITY COMPONENT - PAC	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY INTEREST	3,277.86	3,247.85	3,268.34	3,209.20	3,131.21	3,187.22	3,246.49	3,179.50	3,132.30	3,038.68	3,004.62	3,049.73
INTEREST EXP: BONDS & NOTES	274.94	274.42	273.90	273.38	272.85	272.33	271.80	271.27	270.74	270.21	269.68	269.15
AMORTIZATION OF DEBT EXPENSE	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33
INTEREST INCOME	-	-	-	-	-	-	-	-	-	-	-	-
Total Interest	3,615.13	3,584.60	3,604.57	3,544.91	3,466.39	3,521.88	3,580.62	3,513.10	3,465.37	3,371.22	3,336.63	3,381.21
Net Income Before Dividends	**(2,731.21)**	**1,797.17**	**(2,235.33)**	**7,656.49**	**(2,289.10)**	**(1,240.22)**	**(8,407.44)**	**9,433.92**	**10,168.82**	**(1,423.81)**	**(6,995.05)**	**2,330.44**
DIVIDENDS: COMMON STOCK	-	-	-	-	-	-	-	-	-	-	-	-
Net Income (Or Loss) - YTD	(2,731.21)	(934.04)	(3,169.37)	4,487.12	2,198.02	957.80	(7,449.64)	1,984.28	12,153.10	10,729.29	3,734.24	6,064.68
Net Income (Or Loss) - MTD	(2,731.21)	1,797.17	(2,235.33)	7,656.49	(2,289.10)	(1,240.22)	(8,407.44)	9,433.92	10,168.82	(1,423.81)	(6,995.05)	2,330.44

Pittsfield Aqueduct Company
Balance Sheet
For the Year Ended December 31, 2019

Provided pursuant to NHPUC Rule 1604.01(19)

		1	2	3	4	5	6	7	8	9	10	11	12
	Dec-18	**Jan-19**	**Feb-19**	**Mar-19**	**Apr-19**	**May-19**	**Jun-19**	**Jul-19**	**Aug-19**	**Sep-19**	**Oct-19**	**Nov-19**	**Dec-19**
Assets													
Land													
LAND	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00
EASEMENTS - PITTSFIELD	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19
	60,333.19	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**
Structures													
SOURCE OF SUPPLY STRUCTURES	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05
GENERAL & MISC STRUCTURES	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00
WATER TREATMENT STRUCTURES	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12
RESERVOIRS & DAMS	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46
LAKE, RIVER & OTHER INTAKE-PAC	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60
	-												
SUPPLY MAINS: PITTSFIELD	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72
	1,492,523.95	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**	**1,492,523.95**
Equipment													
POWER GENERATED EQUIP: PAC	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06
ELECTRIC PUMPING EQUIPMENT	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09	1,651.09
PUMPING EQUIP: PUMPS - PAC	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	15,425.94	15,425.94	15,425.94	15,425.94	15,425.94	15,425.94
PURIFICATION SYSTEM EQUIPMENT	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER TREATMENT EQUIPMENT: PAC	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89	17,042.89
WTP EQUIPMENT: MEDIA - PAC	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48
	130,169.56	**130,169.56**	**130,169.56**	**130,169.56**	**130,169.56**	**130,169.56**	**130,169.56**	**131,490.46**	**131,490.46**	**131,490.46**	**131,490.46**	**131,490.46**	**131,490.46**
Transmission & Distribution													
PAVEMENTS - GENERAL	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
PAVEMENTS - TRANS MAINS	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77
PAVEMENTS - DIST MAINS	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30
PAVEMENTS - GATE VALVES	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21
MAINS: 6" & LARGER	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	642,373.35	642,373.35	642,373.35
DEVEL INSTAL MAINS-6" & LARGER	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00
MAINS: 4" & UNDER	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00
GATES: 4" & UNDER	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74
GATES: 6" & LARGER	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76
GATES: UNKNOWN SIZE	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49	284.49
DEVEL INSTAL MAINS: 4" & UNDER	-	-	-	-	-	-	-	-	-	-	-	-	-
MAINS: UNKNOWN SIZE	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48
DEVEL INSTAL MAINS:UNKNOWN SZ	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50
PAVING - SERVICES	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02
NEW SERVICES	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,842.07	112,842.07	117,207.78	117,207.78
RENEWED SERVICES	62,052.18	62,052.18	62,052.18	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44	67,128.44
METERING EQUIPMENT	84,925.75	85,000.34	85,000.34	84,805.08	84,805.08	84,805.08	84,103.92	84,178.51	84,178.51	84,178.65	84,171.84	84,470.21	83,959.14
RADIOS FOR METERING	61,709.75	61,709.75	61,709.75	61,614.75	61,614.75	61,708.57	61,613.56	61,710.44	61,807.32	61,807.32	61,904.20	62,105.00	61,912.24
FIRE PROT EQUIP: HYDRANTS	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27
HYDRANTS - PAVING	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00
HYDRANTS: CIAC	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00
OTHER PLANT & MISC EQUIP: PAC	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00
	2,786,037.30	**2,786,111.89**	**2,786,111.89**	**2,790,897.89**	**2,790,897.89**	**2,790,991.71**	**2,790,195.54**	**2,790,367.01**	**2,790,463.89**	**2,790,348.47**	**2,790,943.44**	**2,795,808.32**	**2,795,104.49**
Miscellaneous Equipment													
SHOP EQUIPMENT	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95
LABORATORY EQUIPMENT	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	31,159.42
COMMUNICATION EQUIPMENT - PAC	25,202.85	25,202.85	25,202.85	25,202.85	25,202.85	25,202.85	25,202.85	25,202.85	30,527.02	30,662.09	30,662.09	30,662.09	30,662.09
COMPUTER EQUIPMENT	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64	24,555.64
MISCELLANEOUS GENERAL EQUIP	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54
	109,773.86	**109,773.86**	**109,773.86**	**109,773.86**	**109,773.86**	**109,773.86**	**109,773.86**	**109,773.86**	**115,098.03**	**115,233.10**	**115,233.10**	**115,233.10**	**113,039.64**
Intangible Plant													
ORGANIZATION EXPENSE	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
	75,550.65	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**
Total Plant in Service	**4,654,388.51**	**4,654,463.10**	**4,654,463.10**	**4,659,249.10**	**4,659,249.10**	**4,659,342.92**	**4,658,546.75**	**4,660,039.12**	**4,665,460.17**	**4,665,479.82**	**4,666,074.79**	**4,670,939.67**	**4,668,042.38**
Accumulated Depreciation													
ACCUMULATED DEPRECIATION: PAC	(1,906,047.48)	(1,914,515.50)	(1,922,983.21)	(1,931,287.55)	(1,939,761.15)	(1,948,235.21)	(1,956,137.48)	(1,964,603.82)	(1,973,098.47)	(1,981,483.68)	(1,989,977.42)	(1,998,382.89)	(2,005,170.77)
ACCUM DEPREC: COST OF REM -PAC	241,875.23	241,883.52	241,883.52	242,447.55	242,447.55	242,447.55	242,447.55	242,455.84	242,455.84	242,464.13	242,528.52	242,561.67	242,583.93
ACCUM DEPRECIATION: LOSS -PAC	191,954.99	191,954.99	191,954.99	192,074.98	192,074.98	192,074.98	192,305.42	192,305.42	192,305.42	192,383.87	192,442.06	192,442.06	194,061.95
	1,472,217.26	**1,480,676.99**	**1,489,144.70**	**1,496,765.02**	**1,505,238.62**	**1,513,712.68**	**1,521,384.51**	**1,529,842.56**	**1,538,337.21**	**1,546,635.68**	**1,555,006.84**	**1,563,379.16**	**1,568,524.89**
Net Plant in Service	**3,182,171.25**	**3,173,786.11**	**3,165,318.40**	**3,162,484.08**	**3,154,010.48**	**3,145,630.24**	**3,137,162.24**	**3,130,196.56**	**3,127,122.96**	**3,118,844.14**	**3,111,067.95**	**3,107,560.51**	**3,099,517.49**
Construction Work in Progress													
CWIP: CONTRACTOR CLEARING -PAC	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	6,707.50	12,031.67	6,842.57	6,707.50	6,176.50	6,176.50	6,176.50

Total Plant	**3,188,878.75**	**3,180,493.61**	**3,172,025.90**	**3,169,191.58**	**3,160,717.98**	**3,152,337.74**	**3,143,869.74**	**3,142,228.23**	**3,133,965.53**	**3,125,551.64**	**3,117,244.45**	**3,113,737.01**	**3,105,693.99**
Current Assets													
Cash													
PETTY CASH: PITTSFIELD/NC	-	-	-	-	-	-	-	-	-	-	-	-	-
CASH: BANK OF AMERICA OPERATNG	-	-	-	-	-	-	-	-	-	-	-	-	-
A/R: BILLED WATER REVENUE	39,644.09	18,219.46	46,627.37	40,333.50	39,862.86	17,248.64	46,525.06	25,662.40	49,743.72	41,126.13	19,347.91	51,483.40	25,221.33
A/R: MISCELLANEOUS	1,939.36	1,939.36	1,939.36	909.36	-	-	-	-	-	-	-	-	587.00
ALLOWANCE FOR DOUBTFUL ACCTS	(475.29)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)
A/R: UNBILLED WATER REVENUE	79,549.00	73,321.00	67,899.00	71,096.00	78,080.00	77,386.00	73,158.00	75,852.00	75,893.00	78,789.00	75,287.00	70,637.00	76,432.00
A/R UNBILLED REV: RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-	-
AR: UNBILLED REV RECOUP 2009	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventory & Supplies													
INVENTORY: PIPES & FITTINGS	-	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: METERS - PAC	-	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: PAC	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid Expenses & Other													
PREPAID INSURANCE	83.33	83.33	410.82	1,888.36	2,014.38	2,140.40	2,266.42	2,392.44	2,518.46	2,644.48	1,757.41	867.51	-
PREPAID PROPERTY TAXES-PAC	-	-	-	-	-	-	-	-	-	-	-	-	-
PREPAID EXPENSES	150.00	672.33	373.66	74.99	597.31	298.63	300.00	275.00	439.66	225.00	716.00	433.00	150.00
PREPAID PROPERTY TAXES	42,523.99	28,349.32	14,174.65	-	-	56,608.66	42,451.99	28,295.32	14,138.65	-	-	54,632.00	40,974.00
	42,757.32	**29,104.98**	**14,959.13**	**1,963.35**	**2,611.69**	**59,047.69**	**45,018.41**	**30,962.76**	**17,096.77**	**2,869.48**	**2,473.41**	**55,932.51**	**41,124.00**
Total Current Assets	**163,414.48**	**122,084.80**	**130,924.86**	**113,802.21**	**120,054.55**	**153,182.33**	**164,201.47**	**131,977.16**	**142,233.49**	**122,284.61**	**96,608.32**	**177,552.91**	**142,864.33**
Other Assets													
Other Deferred Charges													
ACQUISITION PREMIUM - MARA	1,220,574.84	1,217,774.67	1,214,906.58	1,212,038.51	1,209,170.44	1,206,302.36	1,203,434.28	1,200,566.20	1,197,698.13	1,194,830.04	1,191,961.97	1,189,093.90	1,186,225.81
SARBANES-OXLEY	-	-	-	-	-	-	-	-	-	-	-	-	-
TILTON HILL ROAD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-	-
MAIN BREAK - OCTOBER 2003	-	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH MAIN LEAK RESEARCH	-	-	-	-	-	-	-	-	-	-	-	-	-
ABATEMENT	8,971.34	8,971.34	8,971.34	8,971.34	8,971.34	8,971.34	8,971.34	-	-	-	-	-	-
GRANT APPLICATION - 2008	-	-	-	-	-	-	-	-	-	-	-	-	-
LOUDON RD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-	-
FAIRVIEW ROAD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-	-
RATE CASE EXPENSE: 2007	-	-	-	-	-	-	-	-	-	-	-	-	-
2010 DEFERRED RATE CASE EXP	-	-	-	-	-	-	-	-	-	-	-	-	-
RATE CASE EXPENSE: 2012	-	-	-	-	-	-	-	-	-	-	-	-	-
CONCORD HILL ROAD SERVICE REPR	-	-	-	-	-	-	-	-	-	-	-	-	-
EMINENT DOMAIN	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50
WEB SITE UPGRADE 2006	-	-	-	-	-	-	-	-	-	-	-	-	-
WEB-SITE UPGRADE 2011	-	-	-	-	-	-	-	-	-	-	-	-	-
BERRY POND BATHYMETRIC SURVEY	8,247.53	7,990.23	7,732.92	7,475.61	7,218.30	6,962.31	6,704.99	6,447.69	6,190.38	5,933.08	5,675.77	5,418.47	5,161.15
BERRY POND BATHYMETRIC SURVEY	-	-	-	-	-	-	-	-	-	-	-	-	-
EMINENT DOMAIN ALLOWANCE	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)
	1,237,793.71	**1,234,736.24**	**1,231,610.84**	**1,228,485.46**	**1,225,360.08**	**1,222,236.01**	**1,219,110.61**	**1,207,013.89**	**1,203,888.51**	**1,200,763.12**	**1,197,637.74**	**1,194,512.37**	**1,191,386.96**
ACQUISITION PREMIUM - MARA	-	-	-	-	-	-	-	-	-	-	-	-	-
UNAMORTIZED DEBT EXPENSE	21,953.11	21,890.78	21,828.45	21,766.12	21,703.79	21,641.46	21,579.13	21,516.80	21,454.47	21,392.14	21,329.81	21,267.48	21,205.15
Total Other Assets	**1,259,746.82**	**1,256,627.02**	**1,253,439.29**	**1,250,251.58**	**1,247,063.87**	**1,243,877.47**	**1,240,689.74**	**1,228,530.69**	**1,225,342.98**	**1,222,155.26**	**1,218,967.55**	**1,215,779.85**	**1,212,592.11**
Total Assets	**4,612,040.05**	**4,559,205.43**	**4,556,390.05**	**4,533,245.37**	**4,527,836.40**	**4,549,397.54**	**4,548,760.95**	**4,502,736.08**	**4,501,542.00**	**4,469,991.51**	**4,432,820.32**	**4,507,069.77**	**4,461,150.43**
Equity and Liabilities													
Shareholder's Equity													
COMMON STOCK	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
ADDITIONAL PAID IN CAPITAL	(1,935,317.84)	(1,935,317.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)	(1,899,595.84)
RETAINED EARNINGS BEG - PAC	23,553.03	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78	137,453.78
Net Profit or Loss	**113,900.75**	**2,731.21**	**934.04**	**3,169.37**	**(4,487.12)**	**(2,198.02)**	**(957.80)**	**7,449.64**	**(1,984.28)**	**(12,153.10)**	**(10,729.29)**	**(3,734.24)**	**(6,064.68)**
Total Equity	**(1,797,964.06)**	**(1,795,232.85)**	**(1,761,308.02)**	**(1,759,072.69)**	**(1,766,729.18)**	**(1,764,440.08)**	**(1,763,199.86)**	**(1,754,792.42)**	**(1,764,226.34)**	**(1,774,395.16)**	**(1,772,971.35)**	**(1,765,976.30)**	**(1,768,306.74)**

LTD:SRF CATAMOUNT ROAD	(124,170.69)	(123,961.69)	(123,752.69)	(123,542.69)	(123,331.69)	(123,119.69)	(122,906.69)	(122,693.69)	(122,479.69)	(122,264.69)	(122,048.69)	(121,831.69)	(121,614.69)
LTD:FORGIVABLE DEBT - SRF CATAMOUNT ROAD	(40,287.01)	(40,167.82)	(40,048.63)	(39,929.44)	(39,810.25)	(39,691.06)	(39,571.87)	(39,452.68)	(39,333.49)	(39,214.30)	(39,095.11)	(38,975.92)	(38,856.73)
Long Term Debt	**(164,457.70)**	**(164,129.51)**	**(163,801.32)**	**(163,472.13)**	**(163,141.94)**	**(162,810.75)**	**(162,478.56)**	**(162,146.37)**	**(161,813.18)**	**(161,478.99)**	**(161,143.80)**	**(160,807.61)**	**(160,471.42)**
Current Liabilties													
CURRENT PORTION LTD: CATAMOUNT RD	(2,443.00)	(2,453.00)	(2,462.00)	(2,471.00)	(2,480.00)	(2,490.00)	(2,500.00)	(2,509.00)	(2,518.00)	(2,527.00)	(2,537.00)	(2,547.00)	(2,556.00)
	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)
Current Portion of Long Term Debt	**(3,873.28)**	**(3,883.28)**	**(3,892.28)**	**(3,901.28)**	**(3,910.28)**	**(3,920.28)**	**(3,930.28)**	**(3,939.28)**	**(3,948.28)**	**(3,957.28)**	**(3,967.28)**	**(3,977.28)**	**(3,986.28)**
ACCOUNTS PAYABLE	(1,955.60)	(2,623.88)	(1,096.20)	(4,799.75)	(7,541.98)	(87,688.75)	(285.91)	(1,214.20)	110.11	(894.81)	(3,610.21)	(93,007.69)	(3,262.24)
CLEARING ACCOUNT	-	-	-	-	-	-	-	-	-	-	-	-	-
LOCAL PROPERTY TAXES PAYABLE	-	(1,653.42)	(3,306.84)	0.75	(15,827.34)	1,653.91	0.49	(1,652.93)	(3,306.35)	0.23	(15,311.19)	1,653.39	-
ACCRUED TAXES	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	(2,257.91)	-
ACCRUED INTEREST PAYABLE	-	-	-	-	-	-	-	-	-	-	-	-	-
MISC CURRENT ACCRUED LIABILITY	(316.97)	(1,355.89)	(5,374.57)	(335.06)	(352.43)	(254.53)	(6,817.29)	(5,802.96)	(248.51)	(205.16)	(325.16)	(523.91)	(318.68)
ACCRUED LIABILITY - RETAINAGE	-	-	-	-	-	-	-	-	-	-	-	-	-
	(4,530.48)	**(7,891.10)**	**(12,035.52)**	**(7,391.97)**	**(25,979.66)**	**(88,547.28)**	**(9,360.62)**	**(10,928.00)**	**(5,702.66)**	**(3,357.65)**	**(21,504.47)**	**(94,136.12)**	**(3,580.92)**
HARDSHIP CASES: CREDITS	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/TSC	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	63.08	63.24	63.40	63.55	63.70	63.83	63.95	-
AP INTERCO PAY/REC:PEU/PAC	-	(334.55)	(334.55)	(334.55)	(334.55)	(334.55)	(334.55)	(3,099.00)	(4,699.00)	(4,460.05)	(6,674.00)	(12,976.99)	-
INTERCO PAY/REC: PAC/PWW	-	(25,931.34)	(48,421.51)	(92,457.95)	(114,970.52)	(141,260.86)	(168,609.48)	(199,694.20)	(226,148.02)	(249,157.47)	(275,415.72)	(311,403.84)	-
INTERCO LOAN PWW/PAC: RSF	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)
INTERCO PAY/REC: PAC/PEU	-	(0.42)	(1.12)	(1.96)	(2.80)	(3.64)	(1,005.74)	(1,002.58)	(1,013.81)	(1,026.63)	(1,070.40)	(1,090.83)	-
INTERCO ADV-PCP PROM NOTE 5/18	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO LOAN PAC - INTERGRATED	-	-	-	-	-	-	-	-	-	-	-	-	-
NOTE PAYABLE - PCP 2018 1.1M LOAN	(1,147,728.22)	(1,145,659.78)	(1,143,585.80)	(1,141,506.31)	(1,139,421.27)	(1,137,330.67)	(1,135,234.49)	(1,133,132.73)	(1,131,025.36)	(1,128,912.37)	(1,126,793.74)	(1,124,669.47)	(1,122,539.53)
ST NOTE PAYABLE - PCP 2018 1.1M LOAN	(24,396.45)	(24,461.50)	(24,526.75)	(24,592.15)	(24,657.73)	(24,723.48)	(24,789.41)	(24,855.51)	(24,921.79)	(24,988.25)	(25,054.89)	(25,121.70)	(25,188.69)
INTERCO PAY/REC: PAC/PCP	(72,615.09)	2,878.21	(5,839.26)	50,214.08	100,124.60	160,808.66	105,101.02	173,857.37	203,044.26	260,914.56	339,032.03	368,431.58	(1,719.17)
Total Current Liabilities	**(1,266,098.26)**	**(1,218,238.50)**	**(1,251,591.53)**	**(1,232,926.83)**	**(1,222,106.95)**	**(1,248,203.76)**	**(1,251,055.05)**	**(1,215,685.27)**	**(1,207,305.85)**	**(1,167,836.18)**	**(1,134,339.38)**	**(1,217,835.44)**	**(1,169,969.33)**
Other Deferred Credits													
DEFERRED INCOME TAXES	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(508,474.08)	(510,342.07)
ACCUM DEFERRED INC TAX - REG LIAB	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)
	(709,691.08)	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(709,691.08)**	**(711,559.07)**
CONTRIBUTIONS IN AID OF CONST	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)
CIAC-WATER FILTRATION GRANT	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)
	(1,148,636.41)	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**
Reserve for Amort of CIAC: All													
RESERVE FOR AMORT OF CIAC:PAC	474,807.46	476,722.92	478,638.31	480,553.77	482,469.16	484,384.54	486,300.01	488,215.47	490,130.86	492,046.31	493,961.70	495,877.07	497,792.54
	474,807.46	**476,722.92**	**478,638.31**	**480,553.77**	**482,469.16**	**484,384.54**	**486,300.01**	**488,215.47**	**490,130.86**	**492,046.31**	**493,961.70**	**495,877.07**	**497,792.54**
Total Deferred Credits	**(1,383,520.03)**	**(1,381,604.57)**	**(1,379,689.18)**	**(1,377,773.72)**	**(1,375,858.33)**	**(1,373,942.95)**	**(1,372,027.48)**	**(1,370,112.02)**	**(1,368,196.63)**	**(1,366,281.18)**	**(1,364,365.79)**	**(1,362,450.42)**	**(1,362,402.94)**
Total Equity & Liabilties	**(4,612,040.05)**	**(4,559,205.43)**	**(4,556,390.05)**	**(4,533,245.37)**	**(4,527,836.40)**	**(4,549,397.54)**	**(4,548,760.95)**	**(4,502,736.08)**	**(4,501,542.00)**	**(4,469,991.51)**	**(4,432,820.32)**	**(4,507,069.77)**	**(4,461,150.43)**
	-	-	-	-	-	-	-	-	-	-	-	-	-

Pittsfield Aqueduct Company
Profit & Loss Statement
For the Twelve Months Ended December 31, 2018

Provided pursuant to NHPUC Rule 1604.01(19)

	1	2	3	4	5	6	7	8	9	10	11	12
	Jan-18	**Feb-18**	**Mar-18**	**Apr-18**	**May-18**	**Jun-18**	**Jul-18**	**Aug-18**	**Sep-18**	**Oct-18**	**Nov-18**	**Dec-18**
Water Sales												
WATER SALES: BILLED REVENUE	(46,702.40)	(46,685.91)	(54,592.19)	(44,943.01)	(45,712.57)	(51,712.79)	(47,038.80)	(48,430.50)	(53,772.01)	(45,297.51)	(50,797.29)	(44,775.96)
WATER SALES BILLED RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-
WATER SALES: UNBILLED REVENUE	(6,833.00)	7,276.00	3,417.00	(4,563.00)	2,111.00	54.00	(7,934.00)	3,665.00	4,242.00	3,398.00	1,439.00	(9,328.00)
WATER SALES-UNBILLED RECOUPMNT	-	-	-	-	-	-	-	-	-	-	-	-
FIRE PROTECTION REVENUE	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)
CBFRR REVENUES	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)
CBFRR REVENUES - CONTRA	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25
	70,607.96	56,482.47	68,247.75	66,578.57	60,674.13	68,731.35	72,045.36	61,838.06	66,602.57	58,972.07	66,430.85	71,176.52
Other Operating Revenue												
MISC OPERATING REVENUE	(171.00)	(580.00)	(226.00)	(66.00)	(132.00)	(344.00)	(192.00)	(601.00)	(161.00)	(252.00)	(325.00)	(121.00)
	171.00	**580.00**	**226.00**	**66.00**	**132.00**	**344.00**	**192.00**	**601.00**	**161.00**	**252.00**	**325.00**	**121.00**
Total Revenues	70,778.96	57,062.47	68,473.75	66,644.57	60,806.13	69,075.35	72,237.36	62,439.06	66,763.57	59,224.07	66,755.85	71,297.52
Production Expenses												
OTHER PROD LABOR:TREAT PLANT	0	0	0	0	0	0	0	0	0	0	0	0
OTHER PROD MAT&EXP: SRC/SUPPLY	0	0	0	0	0	0	0	0	0	0	0	0
SUPERINTENDENCE: WTP-PAC	-	-	-	-	-	-	-	-	-	-	-	-
BENEFITS: WTP-PAC	-	-	-	-	-	-	-	-	-	-	-	-
POWER PURCHASED: TRT PLT ELEC	595.70	33.36	1,088.36	32.95	483.48	375.95	340.86	359.05	351.97	330.92	406.08	757.88
OPER LABOR: TREATMENT PLANT	6,343.20	6,056.34	6,241.74	5,291.85	4,619.62	4,991.37	4,786.16	8,157.65	5,440.89	5,897.65	4,558.73	5,270.67
OPER EXP T PLANT: MAT & EXP	31.31	60.84	88.04	-	20.65	56.81	10.96	881.36	460.64	97.93	71.96	-
OPER EXP T PLANT: GAS/OIL	1,995.78	-	2,722.61	-	-	-	-	-	1,613.11	1,813.38	1,704.71	-
OPER EXP T PLANT: PHONE	182.20	182.24	182.24	181.65	186.98	186.70	186.58	185.52	187.68	186.71	189.07	300.88
MAINT STRUCT: TREATMENT PLANT	296.69	164.08	74.52	109.61	99.71	235.58	1,530.84	5,164.17	2,727.39	80.51	341.04	153.52
MAINT STRUCT: SOURCE OF SUPPLY	1,419.83	266.31	1,092.96	66.19	387.37	61.83	202.86	309.17	669.22	2,345.21	5,881.29	307.49
MAINT PUMP EQU: HIGH LIFT ELC	-	-	-	-	-	-	49.87	-	-	-	-	-
BOOSTER STATION GENERAL MAINT	-	-	-	-	-	-	-	-	-	-	-	-
CHLORINE: TREATMENT PLANT	644.10	-	419.10	-	419.10	-	519.10	(200.00)	-	469.10	469.10	-
ALUM. SULFATE/FERRIC CHLORIDE	-	-	-	-	869.00	-	-	-	-	840.00	-	-
POLYMERS	-	-	-	-	-	-	-	-	-	-	-	-
CORROSION INHIBITOR	-	70.71	-	-	-	-	-	-	-	69.86	-	-
SODA ASH	895.75	-	-	-	-	-	-	1,539.85	-	-	-	-
LABORATORY EXPENSE	-	-	133.95	-	-	598.43	-	338.59	-	13.81	-	468.00
LAB EXPENSE: OUTSIDE TESTING	511.00	248.00	248.00	388.00	156.00	135.00	729.00	819.00	105.00	682.00	120.20	101.00
MAINT PROC EQU: TRT PLANT	28.67	110.71	734.04	-	17.00	-	71.00	858.91	-	95.60	(32.99)	-
MAINT PROC EQUIP: SCADA & OTHR	114.95	164.61	114.95	344.95	1,214.95	-	229.90	114.95	114.95	118.20	118.20	118.20
	13,059.18	7,357.20	13,140.51	6,415.20	8,473.86	6,641.67	8,657.13	18,528.22	11,670.85	13,040.88	13,827.39	7,477.64
Transmission & Distribution Expenses												
SUPERINTENDENCE: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
BENEFITS: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
MISC GEN EXPENSE/OPERATIONS	-	-	-	148.28	-	-	-	-	-	-	-	-
MISC T&D MATERIALS & SUPPLIES	-	-	-	-	-	-	-	-	-	-	-	-
DUTY PAY	-	-	-	-	-	-	-	-	-	-	-	-
METER OPERATING LABOR & EXP	228.60	203.23	124.39	92.75	123.67	298.94	673.92	-	245.85	248.68	204.58	56.34
MOLE: METER REMOVAL	-	-	-	-	-	-	-	-	-	-	-	-
OTHER EXPENSE ON CUST PREMISIS	-	-	-	771.12	-	-	-	-	-	-	-	-
SMALL TOOLS EXPENSE	146.99	-	23.98	-	-	75.95	122.07	10.29	-	381.12	14.97	109.98
TRANS/EXP: MISCELLANEOUS	-	-	-	-	-	-	-	-	-	-	-	-
GASOLINE	-	-	-	-	-	-	-	-	-	-	-	-
MAINT MAINS: REPAIRS	100.41	271.91	114.99	4,154.63	1,387.29	822.29	4,858.15	759.78	283.15	391.05	286.17	180.39
MAINT MAINS: GATE PROGRAM	-	-	1,396.48	-	-	30.00	3,251.49	5,324.30	-	2,700.00	-	-
MAINT MAINS: FLUSHING LN	-	-	-	-	-	-	-	-	-	-	-	-
MAINT GATES: INSPECTION: PAC	-	-	-	-	-	2,605.48	-	77.60	-	-	-	-
MAINTENANCE: SERVICES	-	325.54	-	349.09	3,506.34	288.75	4,818.16	5,906.71	1,765.34	2,517.03	1,696.14	179.88
MAINTENANCE: METERS	689.67	-	299.96	61.83	269.48	374.31	123.66	225.41	75.89	163.01	461.43	50.59
MAINTENANCE: HYDRANTS-REPAIRS	-	41.21	-	-	-	2,467.83	-	-	-	-	253.56	-
MAINTENANCE: HYDRANTS-PAINTING	-	-	-	-	-	201.76	215.40	-	-	-	-	-
MAINTENANCE: HYDRANTS-INSPECTN	5,404.75	1,180.82	940.11	-	-	151.78	-	-	185.50	961.24	281.35	-

MONITOR CONTRACTORS MARKING	-	124.39	310.97	154.58	1,412.89	219.24	424.42	337.51	148.96	354.01	465.79	123.67
	6,570.42	2,147.10	3,210.88	5,732.28	6,699.67	7,536.33	14,487.27	12,641.60	2,704.69	7,716.14	3,663.99	700.85
Customer Accounts & Collection Expenses												
CUSTOMER ORDS: COLLECTIONS	-	-	62.19	-	-	-	649.23	-	-	-	-	-
CUSTOMER ORDS: COLLECTIONS	-	-	207.79	-	-	-	148.45	-	160.58	-	-	99.91
METER READING	444.75	186.59	124.39	66.19	92.76	116.65	198.56	75.89	165.48	123.67	123.67	61.83
METER READING: TRANSFERS	-	-	-	-	-	-	53.16	-	46.38	-	168.89	75.89
METER READING: EXCEPTIONS	-	-	-	-	-	-	-	-	-	-	-	-
BILLING & ACCOUNTING	-	-	-	-	-	-	-	-	-	-	-	-
BILLING & ACCOUNTING	647.17	550.60	434.27	609.93	558.83	582.92	616.25	591.63	604.37	584.80	564.23	671.92
UNCOLLECTABLE ACCOUNTS	(868.75)	-	-	996.14	-	253.34	494.84	502.61	(371.86)	(108.86)	709.73	475.29
	223.17	737.19	828.64	1,672.26	651.59	952.91	2,160.49	1,170.13	604.95	599.61	1,566.52	1,384.84
Administrative and General Expense												
OFFICE SUPPLIES & EXPENSE	116.81	106.99	204.11	111.31	191.48	112.46	193.01	144.73	114.13	252.51	540.91	103.70
OFFICE SUPPLIES & EXP: PHONE	300.28	299.94	300.09	300.06	300.51	299.75	299.67	300.04	300.12	300.12	299.74	299.82
OUTSIDE SERVICES	-	2,532.33	-	-	-	-	-	-	-	-	-	-
INSURANCE EXPENSE	815.64	815.66	815.64	815.64	815.65	815.64	815.64	815.65	815.64	815.65	815.65	815.64
REGULATORY COMMISSION EXPENSE	271.33	271.33	271.33	271.34	-	271.33	271.34	388.67	388.67	388.66	(274.68)	273.68
MEETING CONVENTION/MEMBSP FEES	-	-	-	-	-	-	-	-	-	-	-	-
LICENSING FEES	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
PUBLIC RELATIONS	-	9.63	-	12.10	-	11.38	22.77	8.63	-	11.39	-	9.21
MEALS	-	-	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS GENERAL EXPENSE	-	102.00	-	-	-	(0.01)	-	-	-	-	-	-
CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: OFFICE FURNT & EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: MISC GENERAL EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT COMPUTER EQUIP: PAC	235.08	235.08	235.08	235.08	235.08	235.08	235.08	235.08	235.08	235.08	235.08	-
	1,764.14	4,397.96	1,851.25	1,770.53	1,567.72	1,770.63	1,862.51	1,917.80	1,878.64	2,028.41	1,641.70	1,527.05
Inter Div Management Fee												
MAINT COMPUTER EQUIP: PAC	510.00	369.00	614.00	413.00	347.00	320.00	249.00	488.00	443.00	394.00	675.00	(182.00)
MAINT COMPUTER EQUIP: PAC	15,908.00	14,926.00	15,261.00	14,200.00	16,372.00	14,730.00	17,336.00	15,862.00	13,076.00	15,150.00	15,434.00	10,425.00
MAINT COMPUTER EQUIP: PAC	-	-	-	-	-	-	-	-	-	-	-	-
	16,418.00	15,295.00	15,875.00	14,613.00	16,719.00	15,050.00	17,585.00	16,350.00	13,519.00	15,544.00	16,109.00	10,243.00
Total Operating Expenses	38,034.91	29,934.45	34,906.28	30,203.27	34,111.84	31,951.54	44,752.40	50,607.75	30,378.13	38,929.04	36,808.60	21,333.38
Depreciation Expense												
DEPRECIATION EXPENSE: PAC	8,492.61	8,499.38	8,497.51	8,496.53	8,499.85	8,500.86	8,505.84	8,506.34	8,413.77	8,489.51	8,469.30	8,464.88
	8,492.61	8,499.38	8,497.51	8,496.53	8,499.85	8,500.86	8,505.84	8,506.34	8,413.77	8,489.51	8,469.30	8,464.88
Amortization Expense: CIAC												
AMORTIZATION EXPENSE: CIAC	(1,915.58)	(1,915.53)	(1,915.60)	(1,915.51)	(1,915.50)	(1,915.61)	(1,915.58)	(1,915.53)	(1,915.60)	(1,915.51)	(1,915.38)	(1,915.47)
Amortization Expense												
AMORT EXP - DEFERRED CHARGES	257.31	257.33	257.31	257.33	257.31	257.32	257.31	257.32	257.31	257.31	257.31	257.32
AMORT: ACQUISITION PREMIUM	2,740.25	2,800.17	2,800.17	2,800.17	2,800.17	2,800.18	2,800.17	2,800.17	2,800.17	2,800.17	2,800.17	2,800.17
	2,997.56	3,057.50	3,057.48	3,057.50	3,057.48	3,057.50	3,057.48	3,057.49	3,057.48	3,057.48	3,057.48	3,057.49
Taxes Other than Income Tax												
LOCAL PROPERTY TAXES	13,208.16	13,208.16	13,208.17	13,208.16	18,566.17	15,887.18	15,887.16	15,887.16	15,887.18	15,886.83	15,940.51	14,883.67
OTHER TAXES	-	-	-	-	-	-	-	-	-	-	-	28,405.91
	13,208.16	13,208.16	13,208.17	13,208.16	18,566.17	15,887.18	15,887.16	15,887.16	15,887.18	15,886.83	15,940.51	43,289.58
GAIN FROM FORGIVENESS SRF DEBT	-	-	-	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)	(119.19)
Income Tax												
PROV/FED INC TAX/CURRENT	1,396.73	319.5	1548.2	2094.86	124.78	2113.43	237.86	-2780.41	1989.78	-1130.82	697.31	-3351.22
PROVS FOR NH BUS PRFTS TAX CUR	570.50	130.51	632.37	855.67	50.96	863.25	97.16	(1,135.69)	812.75	(461.90)	284.83	99,548.59
PROV FEDL INCOME TAX DEFERRED	-	-	-	-	-	-	-	-	-	-	-	3,311.00
PROV NH INCOME TAX DEFERRED	-	-	-	-	-	-	-	-	-	-	-	2,017.00
	1,967.23	450.01	2,180.57	2,950.53	175.74	2,976.68	335.02	(3,916.10)	2,802.53	(1,592.72)	982.14	101,525.37
Total Operating Deducts	62,784.89	53,233.97	59,934.41	55,881.29	62,376.39	60,338.96	70,503.13	72,107.92	58,504.30	62,735.44	63,223.46	175,636.04
Net Operating Income	7,994.07	3,828.50	8,539.34	10,763.28	(1,570.26)	8,736.39	1,734.23	(9,668.86)	8,259.27	(3,511.37)	3,532.39	(104,338.52)

MISC NON-OPERATING INCOME(EXP)	-	-	-	-	-	-	-	-	-	-	-	-
MISC NONUTILITY EXPENSES	-	-	-	-	-	-	-	-	-	-	-	-
Other Income	-	-	-	-	-	-	-	-	-	-	-	-
AFDUC-INT(DEBT) COMPONENT-PAC	-	-	-	-	-	-	-	-	-	-	-	-
AFUDC - EQUITY COMPONENT - PAC	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY INTEREST	5,200.42	5,147.14	5,235.77	5,403.21	425.49	3,245.34	3,298.83	3,251.11	3,234.69	3,204.00	3,371.01	3,353.25
INTEREST EXP: BONDS & NOTES	279.57	279.57	279.57	279.57	279.06	278.55	278.04	277.52	277.01	276.49	275.98	275.46
AMORTIZATION OF DEBT EXPENSE	-	-	-	-	55.95	62.18	62.70	62.35	62.35	62.35	62.35	62.33
INTEREST INCOME	-	-	-	-	-	-	-	-	-	-	-	-
Total Interest	**5,479.99**	**5,426.71**	**5,515.34**	**5,682.78**	**760.50**	**3,586.07**	**3,639.57**	**3,590.98**	**3,574.05**	**3,542.84**	**3,709.34**	**3,691.04**
Net Income Before Dividends	2514.08	-1598.21	3024	5080.5	-2330.76	5150.32	-1905.34	-13259.84	4685.22	-7054.21	-176.95	-108029.56
DIVIDENDS: COMMON STOCK	-	-	-	-	-	-	-	-	-	-	-	-
Net Income (Or Loss) - YTD	2,514.08	915.87	3,939.87	9,020.37	6,689.61	11,839.93	9,934.59	(3,325.25)	1,359.97	(5,694.24)	(5,871.19)	(113,900.75)
Net Income (Or Loss) - MTD	2,514.08	(1,598.21)	3,024.00	5,080.50	(2,330.76)	5,150.32	(1,905.34)	(13,259.84)	4,685.22	(7,054.21)	(176.95)	(108,029.56)

Pittsfield Aqueduct Company
Balance Sheet
For the Year Ended December 31, 2018

Provided pursuant to NHPUC Rule 1604.01(19)

	1	2	3	4	5	6	7	8	9	10	11	12
	Jan-18	**Feb-18**	**Mar-18**	**Apr-18**	**May-18**	**Jun-18**	**Jul-18**	**Aug-18**	**Sep-18**	**Oct-18**	**Nov-18**	**Dec-18**
Assets												
Land												
LAND	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00
EASEMENTS - PITTSFIELD	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19
	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19	60,333.19
Structures												
SOURCE OF SUPPLY STRUCTURES	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05
GENERAL & MISC STRUCTURES	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00
WATER TREATMENT STRUCTURES	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12	935,239.12
RESERVOIRS & DAMS	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46
LAKE, RIVER & OTHER INTAKE-PAC	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60
	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MAINS: PITTSFIELD	309,352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72	309352.72
	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95	1,492,523.95
Equipment												
POWER GENERATED EQUIP: PAC	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06
ELECTRIC PUMPING EQUIPMENT	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,651.09
PUMPING EQUIP: PUMPS - PAC	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04
PURIFICATION SYSTEM EQUIPMENT	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	-
WATER TREATMENT EQUIPMENT: PAC	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	17,042.89	17,042.89	17,042.89	17,042.89
WTP EQUIPMENT: MEDIA - PAC	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48
	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	133,958.03	134,908.33	134,908.33	134,908.33	130,169.56
Transmission & Distribution												
PAVEMENTS - GENERAL	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**	**5,000.00**
PAVEMENTS - TRANS MAINS	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77	2003.77
PAVEMENTS - DIST MAINS	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30
PAVEMENTS - GATE VALVES	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21
MAINS: 6" & LARGER	641,868.44	641,868.44	641,868.44	641,868.44	641,868.44	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45	641,868.45
DEVEL INSTAL MAINS-6" & LARGER	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00
MAINS: 4" & UNDER	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00
GATES: 4" & UNDER	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74	9,998.74
GATES: 6" & LARGER	49,379.13	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76	54,829.76
GATES: UNKNOWN SIZE	754.24	754.24	754.24	754.24	754.24	284.49	284.49	284.49	284.49	284.49	284.49	284.49
DEVEL INSTAL MAINS: 4" & UNDER	-	-	-	-	-	-	-	-	-	-	-	-
MAINS: UNKNOWN SIZE	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48
DEVEL INSTAL MAINS:UNKNOWN SZ	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**	**176,678.50**
PAVING - SERVICES	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02	3700.02
NEW SERVICES	110,817.38	110,817.38	110,817.38	110,817.38	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63	112,957.63
RENEWED SERVICES	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	61,683.14	62,052.18	62,052.18
METERING EQUIPMENT	85,247.38	85,247.38	86,039.76	86,039.76	86,039.76	85,828.24	85,828.24	85,632.98	85,707.66	85,024.25	85,024.25	84,925.75
RADIOS FOR METERING	62,639.95	62,732.80	62,728.49	62,728.49	62,728.49	63,032.86	63,032.86	62,937.85	62,936.67	62,936.67	62,936.67	61,709.75
FIRE PROT EQUIP: HYDRANTS	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	89,988.61	90,328.27	90,328.27	90,328.27	90,328.27	90,328.27
HYDRANTS - PAVING	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00
HYDRANTS: CIAC	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00
OTHER PLANT & MISC EQUIP: PAC	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00
	2,772,115.52	2,777,659.00	2,778,447.07	2,778,447.07	2,780,587.32	2,780,680.18	2,784,434.13	2,784,483.52	2,784,557.02	2,786,993.68	2,787,362.72	2,786,037.30
Miscellaneous Equipment												
SHOP EQUIPMENT	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95
LABORATORY EQUIPMENT	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88
COMMUNICATION EQUIPMENT - PAC	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	25,202.85	25,202.85	25,202.85	25,202.85
COMPUTER EQUIPMENT	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,352.18	27,352.18	27,352.18	24,555.64	24,555.64	24,555.64	24,555.64
MISCELLANEOUS GENERAL EQUIP	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54
	120,254.36	120,254.36	120,254.36	120,254.36	120,254.36	119,818.30	119,818.30	119,818.30	109,773.86	109,773.86	109,773.86	109,773.86
Intangible Plant												
ORGANIZATION EXPENSE	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
Total Plant in Service	4,654,735.70	4,660,279.18	4,661,067.25	4,661,067.25	4,663,207.50	4,662,864.30	4,666,618.25	4,666,667.64	4,657,647.00	4,660,083.66	4,660,452.70	4,654,388.51
Accumulated Depreciation												
ACCUMULATED DEPRECIATION: PAC	(1,827,460.41)	(1,835,959.79)	(1,844,345.74)	(1,852,842.27)	(1,861,342.12)	(1,869,406.92)	(1,877,912.76)	(1,886,248.84)	(1,886,508.49)	(1,894,597.31)	(1,903,066.61)	(1,906,047.48)
ACCUM DEPREC: COST OF REM -PAC	240,093.15	240,698.78	240,786.82	240,786.82	240,786.82	240,786.82	241,203.93	241,241.67	241,487.55	241,834.23	241,875.23	241,875.23
ACCUM DEPRECIATION: LOSS -PAC	188,908.31	188,908.31	188,986.76	188,986.76	188,986.76	188,986.76	188,986.76	189,106.77	191,092.09	191,374.81	191,374.81	191,954.99
	1,398,458.95	1,406,352.70	1,414,572.16	1,423,068.69	1,431,568.54	1,439,633.34	1,447,722.07	1,455,900.40	1,453,928.85	1,461,388.27	1,469,816.57	1,472,217.26
Net Plant in Service	3,256,276.75	3,253,926.48	3,246,495.09	3,237,998.56	3,231,638.96	3,223,230.96	3,218,896.18	3,210,767.24	3,203,718.15	3,198,695.39	3,190,636.13	3,182,171.25
Construction Work in Progress												
CWIP: CONTRACTOR CLEARING -PAC	827.50	827.50	827.50	827.50	827.50	827.50	827.50	827.50	1,860.70	5,673.70	5,673.70	6,707.50

Total Plant	3,257,104.25	3,254,753.98	3,247,322.59	3,238,826.06	3,232,466.46	3,224,058.46	3,219,723.68	3,211,594.74	3,205,578.85	3,204,369.09	3,196,309.83	3,188,878.75
Current Assets												
Cash												
PETTY CASH: PITTSFIELD/NC	-	-	-	-	-	-	-	-	-	-	-	-
CASH: BANK OF AMERICA OPERATNG	-	-	-	-	-	-	-	-	-	-	-	-
A/R: BILLED WATER REVENUE	16,726.68	15,798.16	46,180.69	17,365.11	17,131.20	23,930.02	10,983.81	10,152.35	44,747.42	14,884.83	48,159.12	39,644.09
A/R: MISCELLANEOUS	1,701.00	1,701.00	1,701.00	-	-	-	-	-	-	-	-	1,939.36
ALLOWANCE FOR DOUBTFUL ACCTS	(119.39)	(119.39)	(119.39)	-	-	(253.34)	(494.84)	(928.72)	(108.86)	194.35	(515.38)	(475.29)
A/R: UNBILLED WATER REVENUE	83,326.00	76,050.00	72,633.00	77,196.00	75,085.00	75,031.00	82,965.00	79,300.00	75,058.00	71,660.00	70,221.00	79,549.00
A/R UNBILLED REV: RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-
AR: UNBILLED REV RECOUP 2009	-	-	-	-	-	-	-	-	-	-	-	-
Inventory & Supplies												
INVENTORY: PIPES & FITTINGS	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: METERS - PAC	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: PAC	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Prepaid Expenses & Other												
PREPAID INSURANCE	1,563.24	1,671.71	1,765.28	1,873.67	1,982.05	2,090.44	2,198.83	2,307.21	2,415.60	2,623.98	1,808.33	83.33
PREPAID PROPERTY TAXES-PAC	-	-	-	-	-	-	-	-	-	-	-	-
PREPAID EXPENSES	3,018.47	2,487.06	1,955.65	1,695.56	2,278.15	1,746.74	1,215.32	1,184.57	809.82	435.08	448.68	150.00
PREPAID PROPERTY TAXES	22,937.67	11,468.84	-	-	-	42,443.50	28,295.67	14,147.84	-	-	56,698.66	42,523.99
	27,519.38	15,627.61	3,720.93	3,569.23	4,260.20	46,280.68	31,709.82	17,639.62	3,225.42	3,059.06	58,955.67	42,757.32
Total Current Assets	**129,153.67**	**109,057.38**	**124,116.23**	**98,130.34**	**96,476.40**	**144,988.36**	**125,163.79**	**106,163.25**	**122,921.98**	**89,798.24**	**176,820.41**	**163,414.48**
Other Assets												
Other Deferred Charges												
ACQUISITION PREMIUM - MARA	1,251,376.72	1,248,576.55	1,245,776.38	1,242,976.21	1,240,176.04	1,237,375.86	1,234,575.69	1,231,775.52	1,228,975.35	1,226,175.18	1,223,375.01	1,220,574.84
SARBANES-OXLEY	-	-	-	-	-	-	-	-	-	-	-	-
TILTON HILL ROAD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-
MAIN BREAK - OCTOBER 2003	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH MAIN LEAK RESEARCH	-	-	-	-	-	-	-	-	-	-	-	-
ABATEMENT	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**	**8,971.34**
GRANT APPLICATION - 2008	0	0	0	0	0	0	0	0	0	0	0	0
LOUDON RD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-
FAIRVIEW ROAD MAIN BREAK	0	0	0	0	0	0	0	0	0	0	0	0
RATE CASE EXPENSE: 2007	0	0	0	0	0	0	0	0	0	0	0	0
2010 DEFERRED RATE CASE EXP	-	-	-	-	-	-	-	-	-	-	-	-
RATE CASE EXPENSE: 2012	-	-	-	-	-	-	-	-	-	-	-	-
CONCORD HILL ROAD SERVICE REPR	0	0	0	0	0	0	0	0	0	0	0	0
EMINENT DOMAIN	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**	**3,668.50**
WEB SITE UPGRADE 2006	0	0	0	0	0	0	0	0	0	0	0	0
WEB-SITE UPGRADE 2011	0	0	0	0	0	0	0	0	0	0	0	0
BERRY POND BATHYMETRIC SURVEY	11078.01	10820.68	10563.37	10306.04	10048.73	9791.41	9534.1	9276.78	9019.47	8762.16	8504.85	8247.53
BERRY POND BATHYMETRIC SURVEY	-	-	-	-	-	-	-	-	-	-	-	-
EMINENT DOMAIN ALLOWANCE	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)
	1,271,426.07	1,268,368.57	1,265,311.09	1,262,253.59	1,259,196.11	1,256,138.61	1,253,081.13	1,250,023.64	1,246,966.16	1,243,908.68	1,240,851.20	1,237,793.71
ACQUISITION PREMIUM - MARA	-	-	-	-	-	-	-	-	-	-	-	-
UNAMORTIZED DEBT EXPENSE	20,207.67	20,207.67	20,207.67	21,803.67	22,389.72	22,327.54	22,264.84	22,202.49	22,140.14	22,077.79	22,015.44	21,953.11
Total Other Assets	1,291,633.74	1,288,576.24	1,285,518.76	1,284,057.26	1,281,585.83	1,278,466.15	1,275,345.97	1,272,226.13	1,269,106.30	1,265,986.47	1,262,866.64	1,259,746.82
Total Assets	4677891.66	4652387.6	4656957.58	4621013.66	4610528.69	4647512.97	4620233.44	4589984.12	4597607.13	4560153.8	4635996.88	4612040.05
Equity and Liabilities												
Shareholder's Equity												
COMMON STOCK	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
ADDITIONAL PAID IN CAPITAL	(2,064,823.84)	(2,064,823.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)	(1,935,317.84)
RETAINED EARNINGS BEG - PAC	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03	23,553.03
Net Profit or Loss	**(2,514.08)**	**(915.87)**	**(3,939.87)**	**(9,020.37)**	**(6,689.61)**	**(11,839.93)**	**(9,934.59)**	**3,325.25**	**(1,359.97)**	**5,694.24**	**5,871.19**	**113,900.75**
Total Equity	(2,043,884.89)	(2,042,286.68)	(1,915,804.68)	(1,920,885.18)	(1,918,554.42)	(1,923,704.74)	(1,921,799.40)	(1,908,539.56)	(1,913,224.78)	(1,906,170.57)	(1,905,993.62)	(1,797,964.06)
LTD:SRF CATAMOUNT ROAD	(169,403.69)	(169,204.69)	(169,004.69)	(125,821.69)	(125,618.69)	(125,406.69)	(125,202.69)	(124,997.69)	(124,791.69)	(124,585.69)	(124,378.69)	(124,170.69)
LTD:FORGIVABLE DEBT - SRF CATAMOUNT ROAD	0	0	0	-41240.53	-41121.34	-41002.15	-40882.96	-40763.77	-40644.58	-40525.39	-40406.2	-40287.01

Long Term Debt	-169403.69	-169204.69	-169004.69	-167062.22	-166740.03	-166408.84	-166085.65	-165761.46	-165436.27	-165111.08	-164784.89	-164457.7
Current Liabilties												
CURRENT PORTION LTD: CATAMOUNT RD	(1,759.00)	(1,958.00)	(2,158.00)	(2,359.00)	(2,369.00)	(2,387.00)	(2,396.00)	(2,406.00)	(2,416.00)	(2,425.00)	(2,434.00)	(2,443.00)
	-	-	-	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)	(1,430.28)
Current Portion of Long Term Debt	**(1,759.00)**	**(1,958.00)**	**(2,158.00)**	**(3,789.28)**	**(3,799.28)**	**(3,817.28)**	**(3,826.28)**	**(3,836.28)**	**(3,846.28)**	**(3,855.28)**	**(3,864.28)**	**(3,873.28)**
ACCOUNTS PAYABLE	**(4,821.14)**	**(2,457.79)**	**(3,690.78)**	**(2,650.50)**	**(3,293.74)**	**(882.00)**	**(2,056.10)**	**(7,824.57)**	**(589.58)**	**(10,599.26)**	**(642.35)**	**(1,955.60)**
CLEARING ACCOUNT	0	0	0	0	0	0	0	0	-	-	0	0
LOCAL PROPERTY TAXES PAYABLE	-1739.33	-3478.66	-5217.99	-13208.15	-31774.32	0	-1739.33	-3478.66	0	-15886.83	-3478	0
ACCRUED TAXES	0	0	0	0	0	0	0	0	0	0	0	-2257.91
ACCRUED INTEREST PAYABLE	-	-	-	-	-	-	-	-	-	-	-	-
MISC CURRENT ACCRUED LIABILITY	(580.50)	(2,659.57)	(1,029.66)	(1,199.37)	-	(353.15)	(1,123.11)	(1,054.38)	(2,675.02)	(1,107.77)	(2,029.45)	(316.97)
ACCRUED LIABILITY - RETAINAGE	-	-	-	-	-	-	-	-	-	-	-	-
	-7140.97	-8596.02	-9938.43	-17058.02	-35068.06	-1235.15	-4918.54	-12357.61	-3264.6	-27593.86	-6149.8	-4530.48
HARDSHIP CASES: CREDITS	48.97	48.97	48.97	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/TSC	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	-	-	-	-	-	-	-
AP INTERCO PAY/REC:PEU/PAC	-	-	-	-	-	(100.00)	(1,323.83)	(1,657.42)	(4,057.42)	(4,057.42)	(9,057.42)	-
INTERCO PAY/REC: PAC/PWW	(33,919.26)	(66,197.40)	(98,087.59)	(122,599.30)	(155,201.71)	(184,426.54)	(227,382.64)	(262,456.67)	(287,435.24)	(321,691.08)	(348,213.29)	-
INTERCO LOAN PWW/PAC: RSF	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)
INTERCO PAY/REC: PAC/PEU	-	-	-	-	58.56	58.58	57.22	54.23	(1,140.73)	(1,152.64)	(1,170.31)	-
INTERCO ADV-PCP PROM NOTE 5/18	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	-	-	-	-	-	-	-	-
INTERCO LOAN PAC - INTERGRATED	-	-	-	-	-	-	-	-	-	-	-	-
NOTE PAYABLE - PCP 2018 1.1M LOAN	-	-	-	-	(1,162,054.14)	(1,160,151.61)	(1,157,988.24)	(1,155,947.15)	(1,153,900.61)	(1,151,848.63)	(1,149,791.16)	(1,147,728.22)
ST NOTE PAYABLE - PCP 2018 1.1M LOAN	-	-	-	-	(23,945.86)	(23,882.00)	(24,073.74)	(24,137.94)	(24,202.32)	(24,266.85)	(24,331.57)	(24,396.45)
INTERCO PAY/REC: PAC/PCP	(334,684.54)	(278,961.03)	(378,696.01)	(308,218.02)	157,412.39	116,875.14	185,912.61	241,545.16	253,874.94	338,651.92	268,502.39	(72,615.09)
Total Current Liabilities	(1,167,259.54)	(1,145,468.22)	(1,278,635.80)	(1,241,469.36)	(1,235,552.84)	(1,269,633.60)	(1,246,498.18)	(1,231,748.42)	(1,236,927.00)	(1,208,768.58)	(1,287,030.18)	(1,266,098.26)
Other Deferred Credits												
DEFERRED INCOME TAXES	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(401,226.77)	(508,474.08)
ACCUM DEFERRED INC TAX - REG LIAB	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)	(201,217.00)
	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(602,443.77)	(709,691.08)
CONTRIBUTIONS IN AID OF CONST	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)
CIAC-WATER FILTRATION GRANT	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)
	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)	(1,148,636.41)
Reserve for Amort of CIAC: All												
RESERVE FOR AMORT OF CIAC:PAC	453,736.64	455,652.17	457,567.77	459,483.28	461,398.78	463,314.39	465,229.97	467,145.50	469,061.10	470,976.61	472,891.99	474,807.46
	453,736.64	455,652.17	457,567.77	459,483.28	461,398.78	463,314.39	465,229.97	467,145.50	469,061.10	470,976.61	472,891.99	474,807.46
Total Deferred Credits	(1,297,343.54)	(1,295,428.01)	(1,293,512.41)	(1,291,596.90)	(1,289,681.40)	(1,287,765.79)	(1,285,850.21)	(1,283,934.68)	(1,282,019.08)	(1,280,103.57)	(1,278,188.19)	(1,383,520.03)
Total Equity & Liabilties	(4,677,891.66)	(4,652,387.60)	(4,656,957.58)	(4,621,013.66)	(4,610,528.69)	(4,647,512.97)	(4,620,233.44)	(4,589,984.12)	(4,597,607.13)	(4,560,153.80)	(4,635,996.88)	(4,612,040.05)
	-	-	-	-	-	-	-	-	-	-	-	-

Pittsfield Aqueduct Company
Profit & Loss Statement
For the Twelve Months Ended December 31, 2017

Provided pursuant to NHPUC Rule 1604.01(19)

	1	2	3	4	5	6	7	8	9	10	11	12
	Jan-17	**Feb-17**	**Mar-17**	**Apr-17**	**May-17**	**Jun-17**	**Jul-17**	**Aug-17**	**Sep-17**	**Oct-17**	**Nov-17**	**Dec-17**
Water Sales												
WATER SALES: BILLED REVENUE	(46,358.26)	(44,310.53)	(45,820.98)	(49,780.08)	(44,951.12)	(52,085.28)	(48,027.58)	(49,394.02)	(53,396.74)	(46,585.74)	(46,675.69)	(53,792.14)
WATER SALES BILLED RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-
WATER SALES: UNBILLED REVENUE	(4,256.00)	(1,825.00)	5,323.00	(1,073.00)	2,344.00	(506.00)	(8,250.00)	5,151.00	2,435.00	(6,508.00)	3,724.00	749.00
WATER SALES-UNBILLED RECOUPMNT	-	-	-	-	-	-	-	-	-	-	-	-
FIRE PROTECTION REVENUE	(16,696.90)	(17,001.17)	(16,891.11)	(16,891.11)	(17,798.35)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)	(17,072.56)
CBFRR REVENUES	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)	(12,213.25)
CBFRR REVENUES - CONTRA	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25	12,213.25
	67,311.16	**63,136.70**	**57,389.09**	**67,744.19**	**60,405.47**	**69,663.84**	**73,350.14**	**61,315.58**	**68,034.30**	**70,166.30**	**60,024.25**	**70,115.70**
Other Operating Revenue												
MISC OPERATING REVENUE	(147.00)	(208.00)	(95.00)	(494.00)	(463.00)	(80.00)	(461.00)	(141.00)	(413.00)	(454.00)	(217.00)	(262.00)
	147.00	**208.00**	**95.00**	**494.00**	**463.00**	**80.00**	**461.00**	**141.00**	**413.00**	**454.00**	**217.00**	**262.00**
Total Revenues	**67,458.16**	**63,344.70**	**57,484.09**	**68,238.19**	**60,868.47**	**69,743.84**	**73,811.14**	**61,456.58**	**68,447.30**	**70,620.30**	**60,241.25**	**70,377.70**
Production Expenses												
OTHER PROD LABOR:TREAT PLANT	-	-	-	-	-	-	-	-	-	-	-	-
OTHER PROD MAT&EXP: SRC/SUPPLY	-	-	-	-	-	-	-	-	-	-	-	-
SUPERINTENDENCE: WTP-PAC	-	-	-	-	-	-	-	-	-	-	-	-
BENEFITS: WTP-PAC	-	-	-	-	-	-	-	-	-	-	-	-
POWER PURCHASED: TRT PLT ELEC	479.08	475.37	491.63	516.02	380.91	318.98	297.86	280.47	322.53	277.02	310.32	863.24
OPER LABOR: TREATMENT PLANT	5,241.87	2,833.97	6,925.62	3,846.46	3,786.04	4,039.04	4,885.37	4,271.93	5,005.43	5,450.64	4,727.90	4,957.67
OPER EXP T PLANT: MAT & EXP	65.55	4.68	75.01	-	255.81	15.48	265.18	(265.18)	-	-	-	63.66
OPER EXP T PLANT: GAS/OIL	2,979.64	-	2,235.55	2,011.28	-	-	-	-	-	-	-	2,430.59
OPER EXP T PLANT: PHONE	172.40	173.76	173.76	174.11	174.14	174.14	174.11	179.94	179.43	181.71	181.85	181.82
MAINT STRUCT: TREATMENT PLANT	99.95	-	156.67	104.92	74.52	403.54	74.52	46.97	89.51	1,797.87	2,111.79	159.95
MAINT STRUCT: SOURCE OF SUPPLY	821.83	2,397.95	263.00	555.30	1,883.71	5,200.17	344.26	2,134.63	747.31	568.88	1,348.14	1,605.76
MAINT PUMP EQU: HIGH LIFT ELC	-	-	-	-	-	-	-	-	-	-	-	764.80
BOOSTER STATION GENERAL MAINT	-	-	-	-	307.95	-	-	-	1,200.00	-	-	-
CHLORINE: TREATMENT PLANT	619.10	-	469.10	419.10	669.10	(150.00)	419.10	1,338.10	-	469.10	-	184.55
ALUM. SULFATE/FERRIC CHLORIDE	819.00	-	-	-	-	-	-	-	-	-	-	-
POLYMERS	-	-	-	-	-	-	-	-	-	-	-	-
CORROSION INHIBITOR	333.63	-	213.87	-	-	-	178.22	104.68	69.79	-	-	-
SODA ASH	862.65	-	-	-	-	-	912.65	-	-	-	-	-
LABORATORY EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-
LAB EXPENSE: OUTSIDE TESTING	10.00	548.00	220.00	476.00	24.00	346.00	619.00	263.00	186.00	381.00	259.00	125.00
MAINT PROC EQU: TRT PLANT	-	-	299.22	110.67	208.82	-	420.25	(60.27)	934.51	1,144.91	-	456.22
MAINT PROC EQUIP: SCADA & OTHR	114.95	229.90	373.28	114.95	949.95	114.95	114.95	114.95	243.73	194.93	114.95	672.08
	12,619.65	**6,663.63**	**11,896.71**	**8,328.81**	**8,714.95**	**10,462.30**	**8,705.47**	**8,409.22**	**8,978.24**	**10,466.06**	**9,053.95**	**12,465.34**
Transmission & Distribution Expenses												
SUPERINTENDENCE: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
BENEFITS: OPS-PAC	-	-	-	-	-	-	-	-	-	-	-	-
MISC GEN EXPENSE/OPERATIONS	-	-	-	-	-	-	-	-	-	62.57	(6.59)	15.00
MISC T&D MATERIALS & SUPPLIES	-	-	-	-	-	-	-	-	-	-	-	-
DUTY PAY	1,108.00	1,010.00	1,082.00	1,084.00	(4,284.00)	-	-	-	-	-	-	-
METER OPERATING LABOR & EXP	803.43	819.71	44.41	60.95	431.59	2,152.22	1,191.97	2,105.66	1,082.33	1,394.16	579.05	118.00
MOLE: METER REMOVAL	-	-	-	-	-	-	-	-	-	-	-	-
OTHER EXPENSE ON CUST PREMISIS	-	-	-	-	-	-	-	-	-	-	-	-
SMALL TOOLS EXPENSE	-	-	-	-	291.84	-	-	-	-	110.70	(20.99)	153.45
TRANS/EXP: MISCELLANEOUS	-	-	-	-	-	-	-	-	-	-	-	-
GASOLINE	-	-	-	-	-	-	-	-	-	-	-	-
MAINT MAINS: REPAIRS	-	17.18	-	362.98	2,137.90	1,464.18	692.46	224.06	3,676.10	26.07	132.89	9,177.83
MAINT MAINS: GATE PROGRAM	-	-	2,290.61	-	-	-	-	-	-	845.09	-	-
MAINT MAINS: FLUSHING LN	-	-	-	-	-	-	-	-	-	-	-	-
MAINT GATES: INSPECTION: PAC	-	-	-	-	-	-	-	-	-	-	-	-
MAINTENANCE: SERVICES	17,064.54	603.95	2,447.12	492.02	158.14	111.81	5,982.20	1,219.48	2,171.50	806.30	2,373.22	187.12
MAINTENANCE: METERS	116.47	116.52	202.92	88.82	213.32	590.89	354.62	93.56	91.43	243.81	60.95	276.08

MAINTENANCE: HYDRANTS-REPAIRS	-	-	-	-	91.64	-	-	-	-	31.26	-	-
MAINTENANCE: HYDRANTS-PAINTING	-	-	-	-	-	78.96	(78.96)	35.19	27.56	-	-	-
MAINTENANCE: HYDRANTS-INSPECTN	10.99	492.08	667.24	1,127.60	182.85	994.64	457.13	639.98	518.09	2,350.15	579.03	2,456.38
MONITOR CONTRACTORS MARKING	120.86	-	235.80	262.55	220.35	425.38	517.39	301.02	935.31	381.40	309.03	121.90
	19,224.29	**3,059.44**	**6,970.10**	**3,478.92**	**(556.37)**	**5,818.08**	**9,116.81**	**4,618.95**	**8,502.32**	**6,251.51**	**4,006.59**	**12,505.76**
Customer Accounts & Collection Expenses												
CUSTOMER ORDS: COLLECTIONS	217.97	(217.97)	194.73	(194.73)	-	177.19	-	307.41	356.30	-	-	(840.90)
CUSTOMER ORDS: COLLECTIONS	-	247.45	268.28	374.81	-	-	-	-	-	-	-	1,036.52
METER READING	171.26	172.72	165.81	221.87	434.07	156.56	234.13	186.40	160.92	335.25	152.38	110.90
METER READING: TRANSFERS	-	-	-	-	-	-	-	-	-	-	-	-
METER READING: EXCEPTIONS	-	-	-	-	-	-	-	-	-	-	-	-
BILLING & ACCOUNTING	483.41	(209.64)	(273.77)	-	-	-	(37.78)	-	-	-	-	37.78
BILLING & ACCOUNTING	-	745.85	764.87	494.25	460.65	841.59	490.27	614.74	626.35	538.14	506.44	749.34
UNCOLLECTABLE ACCOUNTS	2,048.96	107.09	525.64	56.33	(500.02)	79.36	(248.36)	541.74	506.20	2,662.36	590.41	494.07
	2,921.60	**845.50**	**1,645.56**	**952.53**	**394.70**	**1,254.70**	**438.26**	**1,650.29**	**1,649.77**	**3,535.75**	**1,249.23**	**1,587.71**
Administrative and General Expense												
OFFICE SUPPLIES & EXPENSE	9.21	6.44	158.74	6.90	6.90	10.46	5.73	9.20	5.52	364.22	6.44	774.23
OFFICE SUPPLIES & EXP: PHONE	350.76	308.93	299.90	300.02	299.94	300.10	300.04	299.94	300.28	300.43	300.09	300.23
OUTSIDE SERVICES	-	-	-	627.50	638.75	-	-	-	-	-	-	-
INSURANCE EXPENSE	1,157.17	867.12	577.07	587.50	654.59	863.91	867.11	867.12	867.12	861.57	883.73	867.78
REGULATORY COMMISSION EXPENSE	231.34	231.33	231.33	231.34	231.33	231.33	231.33	131.33	181.34	-	542.66	271.34
MEETING CONVENTION/MEMBSP FEES	-	-	7.99	-	-	-	-	-	-	-	-	-
LICENSING FEES	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
PUBLIC RELATIONS	-	9.64	11.38	-	3.63	-	-	-	-	-	23.26	2.59
MEALS	-	-	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS GENERAL EXPENSE	-	-	-	102.00	-	-	-	-	-	-	-	-
CHARITABLE CONTRIBUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: OFFICE FURNT & EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT: MISC GENERAL EQUIP	-	-	-	-	-	-	-	-	-	-	-	-
MAINT COMPUTER EQUIP: PAC	-	-	-	-	-	-	-	-	-	-	-	235.08
	1,773.48	**1,448.46**	**1,311.41**	**1,880.26**	**1,860.14**	**1,430.80**	**1,429.21**	**1,332.59**	**1,379.26**	**1,551.22**	**1,781.18**	**2,476.25**
Inter Div Management Fee												
MAINT COMPUTER EQUIP: PAC	453.00	495.00	424.00	492.00	385.00	402.00	322.00	612.00	638.00	581.00	614.00	486.00
MAINT COMPUTER EQUIP: PAC	18,539.00	11,138.00	15,804.00	12,653.00	12,359.00	12,225.00	12,670.00	14,895.00	13,403.00	11,538.00	14,248.00	16,704.00
MAINT COMPUTER EQUIP: PAC	-	-	-	-	-	-	-	-	-	-	-	-
	18,992.00	**11,633.00**	**16,228.00**	**13,145.00**	**12,744.00**	**12,627.00**	**12,992.00**	**15,507.00**	**14,041.00**	**12,119.00**	**14,862.00**	**17,190.00**
Total Operating Expenses	**55,531.02**	**23,650.03**	**38,051.78**	**27,785.52**	**23,157.42**	**31,592.88**	**32,681.75**	**31,518.05**	**34,550.59**	**33,923.54**	**30,952.95**	**46,225.06**
Depreciation Expense												
DEPRECIATION EXPENSE: PAC	7,937.66	8,573.42	8,568.97	8,560.66	8,652.84	8,651.65	8,630.24	8,631.36	8,424.34	8,436.25	8,445.16	9,877.36
	7,937.66	**8,573.42**	**8,568.97**	**8,560.66**	**8,652.84**	**8,651.65**	**8,630.24**	**8,631.36**	**8,424.34**	**8,436.25**	**8,445.16**	**9,877.36**
Amortization Expense: CIAC												
AMORTIZATION EXPENSE: CIAC	(2,000.96)	(1,915.51)	(1,915.51)	(1,915.51)	(1,915.50)	(1,915.60)	(1,915.58)	(1,915.52)	(1,915.60)	(1,915.51)	(1,915.50)	(1,915.61)
Amortization Expense												
AMORT EXP - DEFERRED CHARGES	257.40	257.40	257.31	257.31	257.31	257.32	257.31	257.32	257.31	257.33	257.31	257.33
AMORT: ACQUISITION PREMIUM	2,692.33	2,740.25	2,740.25	2,740.26	2,740.25	2,740.25	2,740.25	2,740.25	2,740.25	2,740.27	2,740.25	2,740.25
	2,949.73	**2,997.65**	**2,997.56**	**2,997.57**	**2,997.56**	**2,997.57**	**2,997.56**	**2,997.57**	**2,997.56**	**2,997.60**	**2,997.56**	**2,997.58**
Taxes Other than Income Tax												
LOCAL PROPERTY TAXES	21,511.50	19,748.50	19,748.50	19,748.50	17,684.50	18,716.50	18,716.50	18,716.50	18,716.50	18,716.50	7,983.17	11,648.83
	21,511.50	**19,748.50**	**19,748.50**	**19,748.50**	**17,684.50**	**18,716.50**	**18,716.50**	**18,716.50**	**18,716.50**	**18,716.50**	**7,983.17**	**11,648.83**
Income Tax												
PROV/FED INC TAX/CURRENT	(6,462.24)	2,488.15	(3,847.18)	2,697.99	2,465.98	2,230.31	3,446.24	(284.44)	1,026.25	1,908.32	2,937.93	(8,607.31)
PROVS FOR NH BUS PRFTS TAX CUR	(1,697.76)	653.69	(1,010.73)	708.82	647.86	585.94	905.40	(74.73)	269.61	501.35	771.86	(2,261.31)
PROV FEDL INCOME TAX DEFERRED	-	-	-	-	-	-	-	-	-	-	-	7,872.00
PROV NH INCOME TAX DEFERRED	-	-	-	-	-	-	-	-	-	-	-	9,181.00
	(8,160.00)	**3,141.84**	**(4,857.91)**	**3,406.81**	**3,113.84**	**2,816.25**	**4,351.64**	**(359.17)**	**1,295.86**	**2,409.67**	**3,709.79**	**6,184.38**
Total Operating Deducts	**77,768.95**	**56,195.93**	**62,593.39**	**60,583.55**	**53,690.66**	**62,859.25**	**65,462.11**	**59,588.79**	**64,069.25**	**64,568.05**	**52,173.13**	**75,017.60**

Net Operating Income	**(10,310.79)**	**7,148.77**	**(5,109.30)**	**7,654.64**	**7,177.81**	**6,884.59**	**8,349.03**	**1,867.79**	**4,378.05**	**6,052.25**	**8,068.12**	**(4,639.90)**
MISC NON-OPERATING INCOME(EXP)	-	-	-	-	-	-	-	-	-	-	-	-
MISC NONUTILITY EXPENSES	-	-	-	-	-	-	-	-	-	-	-	-
Other Income	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
AFDUC-INT(DEBT) COMPONENT-PAC	-	-	-	-	-	-	-	-	-	-	-	-
AFUDC - EQUITY COMPONENT - PAC	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY INTEREST	4,877.89	4,947.08	4,987.00	5,045.62	5,019.16	5,152.43	5,199.08	5,160.20	5,126.17	5,088.14	5,105.30	5,247.02
INTEREST EXP: BONDS & NOTES	48.00	112.00	112.00	112.00	112.00	143.00	(799.57)	-	-	-	-	279.57
AMORTIZATION OF DEBT EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-
INTEREST INCOME	-	-	-	-	-	-	-	-	-	-	-	-
Total Interest	**4,925.89**	**5,059.08**	**5,099.00**	**5,157.62**	**5,131.16**	**5,295.43**	**4,399.51**	**5,160.20**	**5,126.17**	**5,088.14**	**5,105.30**	**5,526.59**
Net Income Before Dividends	**(15,236.68)**	**2,089.69**	**(10,208.30)**	**2,497.02**	**2,046.65**	**1,589.16**	**3,949.52**	**(3,292.41)**	**(748.12)**	**964.11**	**2,962.82**	**(10,166.49)**
DIVIDENDS: COMMON STOCK	-	-	-	-	-	-	-	-	-	-	-	-
Net Income (Or Loss) - YTD	**(15,236.68)**	**(13,146.99)**	**(23,355.29)**	**(20,858.27)**	**(18,811.62)**	**(17,222.46)**	**(13,272.94)**	**(16,565.35)**	**(17,313.47)**	**(16,349.36)**	**(13,386.54)**	**(23,553.03)**
Net Income (Or Loss) - MTD	**(15,236.68)**	**2,089.69**	**(10,208.30)**	**2,497.02**	**2,046.65**	**1,589.16**	**3,949.52**	**(3,292.41)**	**(748.12)**	**964.11**	**2,962.82**	**(10,166.49)**

Pittsfield Aqueduct Company
Balance Sheet
For the Year Ended December 31, 2017

Provided pursuant to NHPUC Rule 1604.01(19)

	1	2	3	4	5	6	7	8	9	10	11	12
	Jan-17	**Feb-17**	**Mar-17**	**Apr-17**	**May-17**	**Jun-17**	**Jul-17**	**Aug-17**	**Sep-17**	**Oct-17**	**Nov-17**	**Dec-17**
Assets												
Land												
LAND	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00	44,180.00
EASEMENTS - PITTSFIELD	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19	16,153.19
	60,333.19	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**	**60,333.19**
Structures												
SOURCE OF SUPPLY STRUCTURES	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05	71,250.05
GENERAL & MISC STRUCTURES	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00	1,080.00
WATER TREATMENT STRUCTURES	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	926,599.12	935,239.12
RESERVOIRS & DAMS	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46	137,331.46
LAKE, RIVER & OTHER INTAKE-PAC	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60	38,270.60
	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MAINS: PITTSFIELD	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72	309,352.72
	1,483,883.95	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,483,883.95**	**1,492,523.95**
Equipment												
POWER GENERATED EQUIP: PAC	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06	55,407.06
ELECTRIC PUMPING EQUIPMENT	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50	1,854.50
PUMPING EQUIP: PUMPS - PAC	12,505.04	12,505.04	12,505.04	12,505.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04	14,105.04
PURIFICATION SYSTEM EQUIPMENT	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36	4,535.36
WATER TREATMENT EQUIPMENT: PAC	6,981.56	6,981.56	6,981.56	6,981.56	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59	16,092.59
WTP EQUIPMENT: MEDIA - PAC	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48	41,963.48
	123,247.00	**123,247.00**	**123,247.00**	**123,247.00**	**133,958.03**	**133,958.03**	**133,958.03**	**133,958.03**	**133,958.03**	**133,958.03**	**133,958.03**	**133,958.03**
Transmission & Distribution												
PAVEMENTS - GENERAL	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
PAVEMENTS - TRANS MAINS	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77	2,003.77
PAVEMENTS - DIST MAINS	92,658.30	92,658.30	92,658.30	92,658.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30	124,788.30
PAVEMENTS - GATE VALVES	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21	2,833.21
MAINS: 6" & LARGER	628,338.00	628,338.00	628,338.00	628,338.00	641,868.44	641,868.44	641,868.44	641,868.44	641,868.44	641,868.44	641,868.44	641,868.44
DEVEL INSTAL MAINS-6" & LARGER	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00	316,734.00
MAINS: 4" & UNDER	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00	216.00
GATES: 4" & UNDER	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99	9,528.99
GATES: 6" & LARGER	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13	49,379.13
GATES: UNKNOWN SIZE	754.24	754.24	754.24	754.24	754.24	754.24	754.24	754.24	754.24	754.24	754.24	754.24
DEVEL INSTAL MAINS: 4" & UNDER	-	-	-	-	-	-	-	-	-	-	-	-
MAINS: UNKNOWN SIZE	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48	1,018,899.48
DEVEL INSTAL MAINS:UNKNOWN SZ	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50	176,678.50
PAVING - SERVICES	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02	3,700.02
NEW SERVICES	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38	110,817.38
RENEWED SERVICES	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07	58,563.07
METERING EQUIPMENT	87,959.07	87,959.07	87,151.65	87,151.65	87,151.65	86,761.13	87,273.45	87,524.62	85,408.30	85,408.30	85,408.30	85,247.38
RADIOS FOR METERING	62,488.49	62,488.49	62,488.49	62,616.27	62,708.09	62,708.09	62,708.09	62,708.09	62,642.48	62,734.95	62,734.95	62,639.95
FIRE PROT EQUIP: HYDRANTS	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66	86,234.66
HYDRANTS - PAVING	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00	184.00
HYDRANTS: CIAC	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00	14,550.00
OTHER PLANT & MISC EQUIP: PAC	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00	1,495.00
	2,729,015.31	**2,729,015.31**	**2,728,207.89**	**2,728,335.67**	**2,774,087.93**	**2,773,697.41**	**2,774,209.73**	**2,774,460.90**	**2,772,278.97**	**2,772,371.44**	**2,772,371.44**	**2,772,115.52**
Miscellaneous Equipment												
SHOP EQUIPMENT	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95	9,687.95
LABORATORY EQUIPMENT	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88	33,352.88
COMMUNICATION EQUIPMENT - PAC	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75	32,450.75
COMPUTER EQUIPMENT	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24	27,788.24
MISCELLANEOUS GENERAL EQUIP	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54	16,974.54
	120,254.36	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**	**120,254.36**
Intangible Plant												
ORGANIZATION EXPENSE	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65	75,550.65
	75,550.65	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**	**75,550.65**
Total Plant in Service	**4,592,284.46**	**4,592,284.46**	**4,591,477.04**	**4,591,604.82**	**4,648,068.11**	**4,647,677.59**	**4,648,189.91**	**4,648,441.08**	**4,646,259.15**	**4,646,351.62**	**4,646,351.62**	**4,654,735.70**
Accumulated Depreciation												
ACCUMULATED DEPRECIATION: PAC	(1,725,555.14)	(1,734,128.56)	(1,742,212.01)	(1,750,772.67)	(1,759,425.51)	(1,767,852.81)	(1,776,483.05)	(1,785,114.41)	(1,792,342.37)	(1,800,778.62)	(1,809,223.78)	(1,818,967.80)
ACCUM DEPREC: COST OF REM -PAC	232,962.60	232,962.60	232,962.60	232,962.60	239,048.32	239,048.32	239,105.24	239,133.15	239,133.15	239,133.15	239,133.15	240,093.15
ACCUM DEPRECIATION: LOSS -PAC	187,312.11	187,312.11	187,634.01	187,634.01	187,634.01	187,800.18	187,800.18	187,800.18	188,785.73	188,785.73	188,785.73	188,908.31
	1,305,280.43	**1,313,853.85**	**1,321,615.40**	**1,330,176.06**	**1,332,743.18**	**1,341,004.31**	**1,349,577.63**	**1,358,181.08**	**1,364,423.49**	**1,372,859.74**	**1,381,304.90**	**1,389,966.34**
Net Plant in Service	**3,287,004.03**	**3,278,430.61**	**3,269,861.64**	**3,261,428.76**	**3,315,324.93**	**3,306,673.28**	**3,298,612.28**	**3,290,260.00**	**3,281,835.66**	**3,273,491.88**	**3,265,046.72**	**3,264,769.36**
Construction Work in Progress												
CWIP: CONTRACTOR CLEARING -PAC	14,860.82	14,860.82	18,574.02	17,142.22	827.50	827.50	827.50	827.50	827.50	827.50	10,427.50	827.50

Total Plant	**3,301,864.85**	**3,293,291.43**	**3,288,435.66**	**3,278,570.98**	**3,316,152.43**	**3,307,500.78**	**3,299,439.78**	**3,291,087.50**	**3,282,663.16**	**3,274,319.38**	**3,275,474.22**	**3,265,596.86**
Current Assets												
Cash												
PETTY CASH: PITTSFIELD/NC	-	-	-	-	-	-	-	-	-	-	-	-
CASH: BANK OF AMERICA OPERATNG	-	-	-	-	-	-	-	-	-	-	-	-
A/R: BILLED WATER REVENUE	21,468.37	18,252.54	15,556.48	23,811.04	19,190.43	42,151.56	22,213.52	20,536.38	28,465.50	17,318.27	28,575.31	45,614.94
A/R: MISCELLANEOUS	-	-	-	-	-	-	-	-	-	-	-	1,701.00
ALLOWANCE FOR DOUBTFUL ACCTS	107.09	-	(525.64)	(56.33)	-	(235.51)	-	(554.18)	(506.37)	(936.62)	(913.57)	(1,107.53)
A/R: UNBILLED WATER REVENUE	78,057.00	79,882.00	74,559.00	75,632.00	73,288.00	73,794.00	82,044.00	76,893.00	74,458.00	80,966.00	77,242.00	76,493.00
A/R UNBILLED REV: RECOUPMENT	-	-	-	-	-	-	-	-	-	-	-	-
AR: UNBILLED REV RECOUP 2009	-	-	-	-	-	-	-	-	-	-	-	-
Inventory & Supplies												
INVENTORY: PIPES & FITTINGS	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: METERS - PAC	-	-	-	-	-	-	-	-	-	-	-	-
INVENTORY: PAC	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid Expenses & Other												
PREPAID INSURANCE	104.05	-	1,854.35	987.23	2,100.93	2,228.59	2,353.05	2,477.50	2,701.95	1,834.86	951.13	83.35
PREPAID PROPERTY TAXES-PAC	-	-	-	-	-	-	-	-	-	-	-	-
PREPAID EXPENSES	1,962.66	1,581.33	1,200.00	1,050.00	1,131.33	1,050.00	900.00	931.34	600.00	450.00	571.34	2,735.88
PREPAID PROPERTY TAXES	35,735.00	17,867.50	-	-	-	50,506.50	33,671.00	16,835.50	-	-	45,875.33	34,406.50
	37,801.71	**19,448.83**	**3,054.35**	**2,037.23**	**3,232.26**	**53,785.09**	**36,924.05**	**20,244.34**	**3,301.95**	**2,284.86**	**47,397.80**	**37,225.73**
Total Current Assets	**137,434.17**	**117,583.37**	**92,644.19**	**101,423.94**	**95,710.69**	**169,495.14**	**141,181.57**	**117,119.54**	**105,719.08**	**99,632.51**	**152,301.54**	**159,927.14**
Other Assets												
Other Deferred Charges												
ACQUISITION PREMIUM - MARA	1,284,259.75	1,281,519.50	1,278,779.25	1,276,038.99	1,273,298.74	1,270,558.49	1,267,818.24	1,265,077.99	1,262,337.74	1,259,597.47	1,256,857.22	1,254,116.97
SARBANES-OXLEY	-	-	-	-	-	-	-	-	-	-	-	-
TILTON HILL ROAD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-
MAIN BREAK - OCTOBER 2003	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH MAIN LEAK RESEARCH	-	-	-	-	-	-	-	-	-	-	-	-
ABATEMENT	4,081.94	4,138.94	4,167.44	4,224.44	4,623.44	5,763.44	8,401.34	8,857.34	8,971.34	8,971.34	8,971.34	8,971.34
GRANT APPLICATION - 2008	-	-	-	-	-	-	-	-	-	-	-	-
LOUDON RD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-
FAIRVIEW ROAD MAIN BREAK	-	-	-	-	-	-	-	-	-	-	-	-
RATE CASE EXPENSE: 2007	-	-	-	-	-	-	-	-	-	-	-	-
2010 DEFERRED RATE CASE EXP	-	-	-	-	-	-	-	-	-	-	-	-
RATE CASE EXPENSE: 2012	-	-	-	-	-	-	-	-	-	-	-	-
CONCORD HILL ROAD SERVICE REPR	-	-	-	-	-	-	-	-	-	-	-	-
EMINENT DOMAIN	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50	3,668.50
WEB SITE UPGRADE 2006	-	-	-	-	-	-	-	-	-	-	-	-
WEB-SITE UPGRADE 2011	-	-	-	-	-	-	-	-	-	-	-	-
BERRY POND BATHYMETRIC SURVEY	14,165.88	13,908.48	13,651.17	13,393.86	13,136.55	12,879.23	12,621.92	12,364.60	12,107.29	11,849.96	11,592.65	11,335.32
BERRY POND BATHYMETRIC SURVEY	-	-	-	-	-	-	-	-	-	-	-	-
EMINENT DOMAIN ALLOWANCE	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)	(3,668.50)
	1,302,507.57	**1,299,566.92**	**1,296,597.86**	**1,293,657.29**	**1,291,058.73**	**1,289,201.16**	**1,288,841.50**	**1,286,299.93**	**1,283,416.37**	**1,280,418.77**	**1,277,421.21**	**1,274,423.63**
ACQUISITION PREMIUM - MARA	-	-	-	-	-	-	-	-	-	-	-	-
UNAMORTIZED DEBT EXPENSE	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67	20,207.67
Total Other Assets	**1,322,715.24**	**1,319,774.59**	**1,316,805.53**	**1,313,864.96**	**1,311,266.40**	**1,309,408.83**	**1,309,049.17**	**1,306,507.60**	**1,303,624.04**	**1,300,626.44**	**1,297,628.88**	**1,294,631.30**
Total Assets	**4,762,014.26**	**4,730,649.39**	**4,697,885.38**	**4,693,859.88**	**4,723,129.52**	**4,786,404.75**	**4,749,670.52**	**4,714,714.64**	**4,692,006.28**	**4,674,578.33**	**4,725,404.64**	**4,720,155.30**
Equity and Liabilities												
Shareholder's Equity												
COMMON STOCK	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
ADDITIONAL PAID IN CAPITAL	(2,185,203.59)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)	(2,064,823.84)
RETAINED EARNINGS BEG - PAC	(3,028.35)	-	-	-	-	-	-	-	-	-	-	-
Net Profit or Loss	**15,236.68**	**13,146.99**	**23,355.29**	**20,858.27**	**18,811.62**	**17,222.46**	**13,272.94**	**16,565.35**	**17,313.47**	**16,349.36**	**13,386.54**	**23,553.03**
Total Equity	**(2,173,095.26)**	**(2,051,776.85)**	**(2,041,568.55)**	**(2,044,065.57)**	**(2,046,112.22)**	**(2,047,701.38)**	**(2,051,650.90)**	**(2,048,358.49)**	**(2,047,610.37)**	**(2,048,574.48)**	**(2,051,537.30)**	**(2,041,370.81)**

LTD:SRF CATAMOUNT ROAD	(134,462.69)	(134,462.69)	(134,462.69)	(134,462.69)	(134,462.69)	(171,162.69)	(171,162.69)	(171,162.69)	(171,162.69)	(171,162.69)	(169,800.69)	(169,800.69)
Long Term Debt	**(134,462.69)**	**(134,462.69)**	**(134,462.69)**	**(134,462.69)**	**(134,462.69)**	**(171,162.69)**	**(171,162.69)**	**(171,162.69)**	**(171,162.69)**	**(171,162.69)**	**(169,800.69)**	**(169,800.69)**
Current Liabilties												
CURRENT PORTION LTD: CATAMOUNT RD	-	-	-	-	-	-	-	-	-	-	(1,362.00)	(1,362.00)
Current Portion of Long Term Debt	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(1,362.00)**	**(1,362.00)**
ACCOUNTS PAYABLE	(5,917.07)	(973.25)	(4,460.90)	(3,083.16)	(35,707.62)	(15,157.13)	(5,230.11)	(2,198.18)	(2,297.33)	(3,695.79)	(4,467.09)	(7,622.39)
CLEARING ACCOUNT	-	-	-	-	-	-	-	-	-	-	-	-
LOCAL PROPERTY TAXES PAYABLE	(1,881.00)	(3,762.00)	(5,643.00)	(19,748.50)	(37,433.00)	-	(1,881.00)	(3,762.00)	-	(18,716.50)	(3,762.00)	-
ACCRUED INTEREST PAYABLE	(2,578.00)	(2,690.00)	(2,802.00)	(2,914.00)	(3,026.00)	(3,169.00)	(2,369.43)	(2,369.43)	(2,369.43)	(279.57)	-	-
MISC CURRENT ACCRUED LIABILITY	-	(523.81)	-	(569.94)	(291.84)	(447.31)	(760.64)	-	(833.59)	(192.09)	(5,722.68)	(317.54)
ACCRUED LIABILITY - RETAINAGE	(10,336.04)	(10,336.04)	(10,336.04)	(10,336.04)	(14,006.04)	(2,801.21)	(2,801.21)	(2,801.21)	(2,801.21)	(2,801.21)	(2,801.21)	-
	(20,712.11)	**(18,285.10)**	**(23,241.94)**	**(36,651.64)**	**(90,464.50)**	**(21,574.65)**	**(13,042.39)**	**(11,130.82)**	**(8,301.56)**	**(25,685.16)**	**(16,752.98)**	**(7,939.93)**
HARDSHIP CASES: CREDITS	-	-	-	-	48.97	48.97	48.97	48.97	48.97	48.97	48.97	48.97
INTERCO PAY/REC: PAC/TSC	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	-	-	-	-	-	-	-
AP INTERCO PAY/REC:PEU/PAC	-	-	-	(627.50)	(627.50)	(627.50)	(627.50)	(2,527.50)	(3,727.50)	(3,727.50)	(6,527.50)	-
INTERCO PAY/REC: PAC/PWW	(45,882.82)	(66,349.63)	(98,036.03)	(119,658.00)	(149,318.00)	(175,911.85)	(206,030.67)	(232,855.53)	(261,285.32)	(287,039.37)	(311,838.93)	-
INTERCO LOAN PWW/PAC: RSF	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)	(12,954.74)
INTERCO PAY/REC: PAC/PEU	-	-	-	(0.39)	(1.17)	(2.09)	(3.01)	(5.31)	(9.88)	(15.33)	(22.83)	-
INTERCO ADV-PCP PROM NOTE 5/18	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)	(776,850.00)
INTERCO LOAN PAC - INTERGRATED	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PCP	(294,620.39)	(368,449.64)	(311,166.20)	(270,899.63)	(216,613.45)	(285,810.20)	(225,454.55)	(168,891.01)	(122,041.27)	(62,421.62)	(93,525.73)	(410,666.98)
Total Current Liabilities	**(1,151,020.06)**	**(1,242,889.11)**	**(1,222,248.91)**	**(1,217,641.90)**	**(1,246,780.39)**	**(1,273,682.06)**	**(1,234,913.89)**	**(1,205,165.94)**	**(1,185,121.30)**	**(1,168,644.75)**	**(1,219,785.74)**	**(1,209,724.68)**
Other Deferred Credits												
DEFERRED INCOME TAXES	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(585,549.95)	(401,226.77)
ACCUM DEFERRED INC TAX - REG LIAB	-	-	-	-	-	-	-	-	-	-	-	(201,217.00)
	(585,549.95)	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(585,549.95)**	**(602,443.77)**
CONTRIBUTIONS IN AID OF CONST	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)	(750,286.50)
CIAC-WATER FILTRATION GRANT	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)	(398,349.91)
	(1,148,636.41)	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**	**(1,148,636.41)**
Reserve for Amort of CIAC: All												
RESERVE FOR AMORT OF CIAC:PAC	430,750.11	432,665.62	434,581.13	436,496.64	438,412.14	440,327.74	442,243.32	444,158.84	446,074.44	447,989.95	449,905.45	451,821.06
	430,750.11	**432,665.62**	**434,581.13**	**436,496.64**	**438,412.14**	**440,327.74**	**442,243.32**	**444,158.84**	**446,074.44**	**447,989.95**	**449,905.45**	**451,821.06**
Total Deferred Credits	**(1,303,436.25)**	**(1,301,520.74)**	**(1,299,605.23)**	**(1,297,689.72)**	**(1,295,774.22)**	**(1,293,858.62)**	**(1,291,943.04)**	**(1,290,027.52)**	**(1,288,111.92)**	**(1,286,196.41)**	**(1,284,280.91)**	**(1,299,259.12)**
Total Equity & Liabilties	**(4,762,014.26)**	**(4,730,649.39)**	**(4,697,885.38)**	**(4,693,859.88)**	**(4,723,129.52)**	**(4,786,404.75)**	**(4,749,670.52)**	**(4,714,714.64)**	**(4,692,006.28)**	**(4,674,578.33)**	**(4,725,404.64)**	**(4,720,155.30)**
	-	-	-	-	-	-	-	-	-	-	-	-

TAB 35

1604.01(a)(20) Quarterly Income Statements for Previous Two Years

PITTSFIELD AQUEDUCT
Profit and Loss Statement
January - December 2018

Provided pursuant to NHPUC Rule 1604.01(20)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total 2018
WATER SALES	158,698.43	159,344.30	163,846.24	159,939.69	641,828.66
CBFRR REVENUES	36,639.75	36,639.75	36,639.75	36,639.75	146,559.00
MISC OPERATING REVENUE	977.00	542.00	954.00	698.00	3,171.00
TOTAL REVENUES	196,315.18	196,526.05	201,439.99	197,277.44	791,558.66
	-	-	-	-	
PRODUCTION EXPENSES	33,556.89	21,530.73	38,856.20	34,345.91	128,289.73
TRANSMISSION AND DISTRIB EXP	11,928.40	19,968.28	29,833.56	12,080.98	73,811.22
CUSTOMER ACCT & COLLECTION EXP	1,789.00	3,276.76	3,935.57	3,550.97	12,552.30
ADMINISTRATIVE & GENERAL EXP	8,013.35	5,108.88	5,658.95	5,197.16	23,978.34
INTERCO MGMT FEE: PWW	46,095.00	45,302.00	46,274.00	41,009.00	178,680.00
	-	-	-	-	
INTERCOMPANY MGMT FEE: PCP	1,493.00	1,080.00	1,180.00	887.00	4,640.00
TOTAL OPERATING EXPENSES	102,875.64	96,266.65	125,738.28	97,071.02	421,951.59
	-	-	-	-	
DEPRECIATION EXPENSE: PAC	25,489.50	25,497.24	25,425.95	25,423.69	101,836.38
AMORTIZATION EXPENSE: CIAC	(5,746.71)	(5,746.62)	(5,746.71)	(5,746.36)	(22,986.40)
AMORT: ACQUISITION PREMIUM	8,340.59	8,400.52	8,400.51	8,400.51	33,542.13
AMORT EXP - DEFERRED CHARGES	771.95	771.96	771.94	771.94	3,087.79
GAIN FROM FORGIVENESS SRF DEBT	-	(357.57)	(357.57)	(357.57)	(1,072.71)
NH BET TAX	-	-	-	28,405.91	28,405.91
LOCAL PROPERTY TAXES	39,624.49	47,661.51	47,661.50	46,711.01	181,658.51
INCOME TAXES	4,597.81	6,102.95	(778.55)	100,914.79	110,837.00
TOTAL OPERATING DEDUCTIONS	175,953.27	178,596.64	201,115.35	301,594.94	857,260.20
	-	-	-	-	
NET OPERATING INCOME	20,361.91	17,929.41	324.64	(104,317.50)	(65,701.54)
	-	-	-	-	
	-	-	-	-	
INTEREST EXPENSE	(838.71)	(837.18)	(832.57)	(827.93)	(3,336.39)
AMORTIZATION OF DEBT EXPENSE	-	(118.13)	(187.40)	(187.03)	(492.56)
	-	-	-	-	
	-	-	-	-	
INTERCOMPANY INTEREST	(15,583.33)	(9,074.04)	(9,784.63)	(9,928.26)	(44,370.26)
TOTAL INTEREST EXPENSE, NET	(16,422.04)	(10,029.35)	(10,804.60)	(10,943.22)	(44,862.82)
	-	-	-	-	
NET INCOME (OR LOSS)	3,939.87	7,900.06	(10,479.96)	(115,260.72)	(113,900.75)

PITTSFIELD AQUEDUCT
Profit and Loss Statement
January - December 2019

Provided pursuant to NHPUC Rule 1604.01(20)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total 2019
WATER SALES	148,643.32	155,058.93	166,495.39	155,117.53	625,315.17
CBFRR REVENUES	36,639.75	36,639.75	36,639.75	36,639.75	256,478.25
MISC OPERATING REVENUE	343.00	760.00	791.00	769.00	4,557.00
TOTAL REVENUES	185,626.07	192,458.68	203,926.14	192,526.28	886,350.42
	-	-	-	-	
PRODUCTION EXPENSES	35,104.67	29,831.23	27,920.51	38,459.71	224,172.53
TRANSMISSION AND DISTRIB EXP	10,556.48	17,903.41	12,756.64	19,962.69	102,395.75
CUSTOMER ACCT & COLLECTION EXP	2,589.73	3,067.28	5,047.74	4,889.49	26,298.99
ADMINISTRATIVE & GENERAL EXP	4,685.92	4,489.69	13,200.59	4,412.88	49,165.28
INTERCO MGMT FEE: PWW	45,648.00	40,485.00	38,800.00	45,086.00	294,952.00
INTERCOMPANY MGMT FEE: PCP	1,298.00	1,174.00	950.00	1,096.00	7,940.00
TOTAL OPERATING EXPENSES	99,882.80	96,950.61	98,675.48	113,906.77	704,924.55
	-	-	-	-	
DEPRECIATION EXPENSE: PAC	25,410.34	25,415.66	25,457.76	25,288.40	177,855.92
AMORTIZATION EXPENSE: CIAC	(5,746.31)	(5,746.24)	(5,746.30)	(5,746.23)	(40,223.93)
AMORT: ACQUISITION PREMIUM	8,536.33	8,604.23	8,604.24	8,604.23	60,093.83
AMORT EXP - DEFERRED CHARGES	771.92	770.62	771.91	771.93	5,400.83
GAIN FROM FORGIVENESS SRF DEBT	(357.57)	(357.57)	(357.57)	(357.57)	(2,502.99)
NH BET TAX	-	-	-	1,258.00	1,258.00
LOCAL PROPERTY TAXES	47,484.24	47,448.27	47,412.25	45,347.23	330,036.75
INCOME TAXES	2,009.39	4,712.75	7,353.98	(547.12)	27,605.12
TOTAL OPERATING DEDUCTIONS	177,991.14	177,798.33	182,171.75	188,525.64	1,264,448.08
	-	-	-	-	
NET OPERATING INCOME	7,634.93	14,660.35	21,754.39	4,000.64	(378,097.66)
	-	-	-	-	
	-	-	-	-	
INTEREST EXPENSE	(823.26)	(818.56)	(813.81)	(809.04)	(5,720.30)
AMORTIZATION OF DEBT EXPENSE	(186.99)	(186.99)	(186.99)	(186.99)	(1,308.93)
	-	-	-	-	
	-	-	-	-	
INTERCOMPANY INTEREST	(9,794.05)	(9,527.63)	(9,558.29)	(9,093.03)	(66,852.97)
TOTAL INTEREST EXPENSE, NET	(10,804.30)	(10,533.18)	(10,559.09)	(10,089.06)	(68,161.90)
	-	-	-	-	
NET INCOME (OR LOSS)	(3,169.37)	4,127.17	11,195.30	(6,088.42)	(451,979.86)

TAB 36

1604.01(a)(21) Quarterly Sales Volumes for the previous 2 years, itemized for residential and other classifications of service, if not previously filed with the Commission.

Pittsfield Aqueduct Company, Inc.
Quarterly Sales Volume Schedule for
the Five Years from 2017 through 2018

Provided pursuant to NHPUC Rule 1604.01(21)

2017

Customer Type	March $	March Cons.	June $	June Cons.	September $	September Cons.	December $	December Cons.	Total $	Total Cons.
Residential	$ 103,715	9,519	$ 110,513	10,579	$ 116,589	11,479	$ 107,924	10,144	$ 438,740	41,721
Commercial	$ 29,041	2,564	$ 31,084	2,822	$ 30,607	2,743	$ 30,723	2,771	$ 121,455	10,900
Industrial	$ 6,284	544	$ 7,518	730	$ 7,190	683	$ 10,730	1,238	$ 31,723	3,195
Municipal	$ 48,039	310	$ 49,465	374	$ 47,650	169	$ 48,894	349	$ 194,048	1,202
	$ 187,079	12,937	$ 198,579	14,505	$ 202,036	15,074	$ 198,271	14,502	$ 2,692	Unbilled Revenue
									$ -	Abatements
									$ -	Other Adjustments
									$ -	Recoupment
									$ 788,657	57,018

2018

Customer Type	March $	March Cons.	June $	June Cons.	September $	September Cons.	December $	December Cons.	Total $	Total Cons.
Residential	$ 108,184	10,237	$ 107,015	10,064	$ 116,389	11,469	$ 106,503	9,935	$ 438,091	41,705
Commercial	$ 28,835	2,487	$ 28,748	2,471	$ 29,183	2,524	$ 29,907	2,655	$ 116,673	10,137
Industrial	$ 13,484	1,663	$ 9,227	1,006	$ 7,030	667	$ 7,128	682	$ 36,870	4,018
Municipal	$ 48,823	334	$ 48,596	315	$ 47,857	206	$ 48,551	296	$ 193,827	1,151
	$ 199,327	14,721	$ 193,586	13,856	$ 200,459	14,866	$ 192,088	13,568	$ 3,056	Unbilled Revenue
									$ (129)	Abatements
									$ -	Other Adjustments
									$ -	Recoupment
									$ 788,388	57,011

TAB 37

1604.01(a)(22) Projected Need for External Capital for the 2 year period immediately following the test year.

Pittsfield Aqueduct Company
Capital Expenditure Budget - 2020

Provided pursuant to NHPUC Rule 1604.01(a)(22)

Project Name	Project Description	Total Budgeted Amount (including O/H)	Funding Source
Berry Pond Dam Breach and ERP	NHDES required studies for Berry Pond Dam	$ 7,000	Intercompany
New Services (1)	New Services (1)	$ 5,000	Intercompany
Renewed Services (2)	Renewed Services (2)	$ 11,000	Intercompany
Replacement Hydrants (2)	Repalce failed Hydrant (2)	$ 12,000	Intercompany
Replacement/New Gate Valve (2)	Replacement/New Gate Vavle installation (2)	$ 8,000	Intercompany
Radios New (1) Replace Failed (9)	Replace failed Radios (9), Meters for New customers (1)	$ 1,000	Intercompany
Meters 5/8"-6" New(1) Replace Failed (6)	Meters 5/8"-6" New Meters - PAC (7)	$ 700	Intercompany
Berry Pond DBP Treatment evaluation/design	Berry Pond DBP Treatment evaluation/design	$ 20,000	Intercompany
Misc. structural improvements	Misc. structural improvements	$ 10,000	Intercompany
PAC lab/Process equipment	PAC lab/Process equipment	$ 10,000	Intercompany
Replace filter valve actuators, 3	Replace filter valve actuators, 3	$ 4,000	Intercompany
Replace SCADA PLC	Equipment no longer supported by manufacturer	$ 15,000	Intercompany
Switch Replacement for Pittsfield	Change out end of life switch in Pitts.	$ 1,200	Intercompany
	Total Budgetted CAPEX -	**$ 104,900**	

Pittsfield Aqueduct Company
Capital Expenditure Budget - 2021

Provided pursuant to NHPUC Rule 1604.01(a)(22)

Project Name	Project Description	Total 2021 incl O/H	Funding Source
PAC Distribution Storage Tank	Design of 500,000 gallon concrete tank, Construction targeted for 2022	$ 40,000	Intercompany
New Services (1)	New Services (1)	$ 5,000	Intercompany
Renewed Services (2)	Renewed Services (2)	$ 11,000	Intercompany
Replacement Hydrants (2)	Repalce failed Hydrant (2)	$ 12,000	Intercompany
Replacement/New Gate Valve (2)	Replacement/New Gate Vavle installation (2)	$ 8,000	Intercompany
Radios New (1) Replace Failed (9)	Replace failed Radios (9), Meters for New customers (1)	$ 1,000	Intercompany
2021 Radios (90)	Year 1 of 7 year replacement of all PEU radios (all initial radios installed in 2007)	$ 12,000	Intercompany
Meters 5/8"-6" New(1) Replace Failed (6)	Meters 5/8"-6" New Meters - PAC (7)	$ 700	Intercompany
Misc. structural improvements	Misc. structural improvements	$ 10,500	Intercompany
PAC lab/Process equipment - four turbidimeters, 1 Chlorine analyzer	PAC lab/Process equipment - four turbidimeters, 1 Chlorine analyzer	$ 25,000	Intercompany
Replace filter valve actuators, 3	Replace filter valve actuators, 3	$ 4,000	Intercompany
	Total Budgetted CAPEX -	**$ 129,200**	

TAB 38

1604.01(a)(23) Capital Budget - Sources and Uses of funds for the 2 years immediately following the test year

Pittsfield Aqueduct Company, Inc.
Capital and Construction Budget 2020

Provided pursuant to NHPUC Rule 1604.01(23)

Department		Project Description	Total Budgeted Amount (including O/H)	Funding Source
	2019 Carryover/Multi-year Projects			
Engineering			-	
		Subtotal 2019 Carryover/Multi-year Projects	-	
	New 2020 Projects			
Engineering	Breach and ERP	Breach and ERP	7.00	Intercompany
		Subtotal New 2020 Projects	**7.00**	
		Total 2020 Capital Projects Budget including 2019 carryover	**7.00**	

		Project Description	-	Funding Source
	2019 Carryover/Multi-year Projects			
T&D			-	
		Subtotal 2019 Carryover/Multi-year Projects	-	
	New 2020 Projects			
T&D	New Services (1)	New Services (1)	5.00	Intercompany
T&D	Renewed Services (2)	Renewed Services (2)	11.00	Intercompany
T&D	Hydrants (2)	Hydrants (2)	12.00	Intercompany
T&D	Gates (2)	New Gates installation (2)	8.00	Intercompany
T&D	Radios (10)	Replace failed Radios (10)	1.00	Intercompany
T&D	Meters 5/8"-6" New(1) Replace Failed (6)	Meters 5/8"-6" New Meters - PAC (7)	0.70	Intercompany
			-	
			-	
		Subtotal New 2020 Projects	**37.70**	
		Total 2020 Capital Projects Budget including 2019 carryover	**37.70**	

		Project Description	Total 2020 incl O/H	Funding Source
	2019 Carryover/Multi-year Projects			
Water Supply		n/a	-	
		Subtotal 2019 Carryover/Multi-year Projects	-	
	New 2020 Projects			
Water Supply	Berry Pond DBP Treatment evaluation/design	Berry Pond DBP Treatment evaluation/design	20.00	Intercompany
Water Supply	Misc. structural improvements	Misc. structural improvements	10.00	Intercompany
Water Supply	PAC lab/Process equipment	PAC lab/Process equipment	10.00	Intercompany
Water Supply	Replace filter valve actuators, 3	Replace filter valve actuators, 3	4.00	Intercompany
Water Supply	Replace SCADA PLC	Equipment no longer supported by manufacturer	15.00	Intercompany
		Subtotal New 2020 Projects	**59.00**	
		Total 2020 Capital Projects Budget including 2019 carryover	**59.00**	

		Project Description	-	Funding Source
			-	
IT			-	
		Subtotal 2019 Carryover/Multi-year Projects	-	
	PAC lab/Process equipment			
IT	Switch Replacement for Pittsfield	Change out end of life switch in Pitts.	**1.20**	Bond
			-	
		New Gates installation (2)	**1.20**	
		Total 2020 Capital Projects Budget including 2019 carryover	**1.20**	

2019 Carryover/Multi-year Projects - Total PAC	**-**
New 2020 Projects - Total PAC	**104.90**
Total Capital Budget - PAC	**104.90**

Pittsfield Aqueduct Company, Inc.
Capital and Construction Budget 2021

Provided pursuant to NHPUC Rule 1604.01(23)

Department		Project Description	Total Budgeted Amount (including O/H)	Funding Source
	2020 Carryover/Multi-year Projects			
Engineering			-	
		Subtotal 2020 Carryover/Multi-year Projects	-	
	New 2021 Projects			
Engineering	Design - 500,000 Gallon Concrete Tank	Design - 500,000 Gallon Concrete Tank	40.00	SRF
			-	
		Subtotal New 2021 Projects	**40.00**	
		Total 2021 Capital Projects Budget including 2020 carryover	**40.00**	

		Project Description	Total 2021 incl O/H	Funding Source
	2020 Carryover/Multi-year Projects			
T&D			-	
		Subtotal 2020 Carryover/Multi-year Projects	-	
	New 2021 Projects			
T&D	New Services (1)	New Services (1)	5.00	Intercompany
T&D	Renewed Services (2)	Renewed Services (2)	11.00	Intercompany
T&D	Hydrants (2)	Hydrants (2)	12.00	Intercompany
T&D	Gates (2)	New Gates installation (2)	8.00	Intercompany
T&D	Radios (10)	Replace failed Radios (10)	1.00	Intercompany
T&D	2021 Radios (90)	Begin 7 year replacement of all PEU radios (all initial radios installed in 2007)	12.00	Intercompany
T&D	Meters 5/8"-6" New(1) Replace Failed (6)	Meters 5/8"-6" New Meters - PAC (7)	0.70	Intercompany
			-	
		Total 2021 Capital Projects Budget	**49.70**	
		Total 2021 Capital Projects Budget including 2020 carryover	**49.70**	

		Project Description	Total 2021 incl O/H	Funding Source
	2020 Carryover/Multi-year Projects			
Water Supply			-	
		Subtotal 2020 Carryover/Multi-year Projects	-	
	New 2021 Projects			
Water Supply	Misc. structural improvements	Misc. structural improvements	10.00	Intercompany
Water Supply	PAC lab/Process equipment	PAC lab/Process equipment	10.00	Intercompany
Water Supply	DBP treatment	DBP treatment	100.00	Intercompany
			-	
			-	
		Subtotal New 2021 Projects	**120.00**	
		Total 2021 Capital Projects Budget including 2020 carryover	**120.00**	

2020 Carryover/Multi-year Projects - Total PAC	**-**
New 2021 Projects - Total PAC	**209.70**
Total Capital Budget - PAC	**209.70**

TAB 39

1604.01(a)(24) Outstanding Short-Term Debt on Monthly Basis for Each Indebtedness

See prior tab (TAB 13) for schedules 1604.08 and in particular Schedule 6, Cost of Short Term Debt.

TAB 40

1604.01(a)(25) Certificate of Details of Management Fee Information. [If a utility is a subsidiary, a certificate of an appropriate official of the subsidiary detailing any expense of the parent company which was included in the subsidiary's cost of serv

See Tabs 3 and 33.

TAB 41

Summary or Rate Case Expense Estimates

DW 20-153 Pittsfield Aqueduct Company, Inc.
Rate Case Expense Report

Puc 1905.01(a)

Pursuant to N.H. Code Admin. R. Puc 1905.01(a), Pittsfield Aqueduct Company, Inc. (PAC) hereby provides the following rate case expense information:

1. Puc 1905.01(a)(1)(a), The name of the service provider

N.H. Brown Law, PLLC

2. Puc 1905.01(a)(1)(b), The procurement process

PAC conducted a thorough, competitively bid selection process to secure outside consultant services for its rate case. PAC solicited proposals and interviewed multiple firms. PAC selected N.H. Brown Law, PLLC for its legal services.

3. Puc 1905.01(a)(1)(c), The amount of the expense

To date, PAC has incurred approximately $5,000 in legal fees.

4. Puc 1905.01(a)(1)(d), A description of the charge or service rendered

NH Brown Law, PLLC provides legal services in connection to PAC's rate case.

5. Puc 1905.01(a)(2) A list of all services to be rendered on behalf of the utility in the full rate case by any vendor; and

There are no additional vendors than who have been listed above.

6. Puc 1905.01(a)(3), The total estimated costs of each service.

NH Brown Law, PLLC legal fees are projected to cost $65,000.